Real Estate Investing: Rentals, House Hacks and Deal Analysis

First edition | 10 units | 50 lessons + the Deal Analyzer | A video for every lesson

FIRST EDITION

Course guide

This is a full-year course for high-school students (grades 10–12) in investing in **single-family homes and small multifamily buildings** — the kind of real estate an ordinary family can buy, improve and hold for a lifetime. It covers the ground practical investor-educators such as the BiggerPockets community are known for: choosing markets and reading neighborhoods; estimating rents and after-repair values from comparables; the full deal analysis of a rental — income, vacancy, every expense, net operating income, cash flow, cap rate, cash-on-cash return and DSCR; financing for investors and for owner-occupants; house hacking; small multifamily; BRRRR (buy, rehab, rent, refinance, repeat); fix-and-flips; short- and mid-term rentals; landlording and property management; taxes, insurance and asset protection; and scaling a portfolio.

Numbers are the spine of the course. Every lesson is worked in the free School Launch Deal Analyzer — rental, house hack, BRRRR and fix-and-flip worksheets that compute cash flow, returns, the rules of thumb, a 30-year projection and a stress test, and that print as filled-in or blank worksheets — and also by hand, so the student understands every number the tool produces. Through the year the student builds a **deal binder** of analyzed properties from real public listings, ending with a capstone deal analyzed, defended and presented to a panel of adults.

Every lesson begins with a true story — a landlord, a builder, a lender or a law that shaped how ordinary people own property — then teaches the big idea, the mechanics and the traps, with worked examples, a project, a picture study, a practice set, Scripture and a family game. The course is honest about risk: borrowing multiplies losses as well as gains, most deals should be walked away from, and wealth in rental property comes slowly to patient, careful stewards. It pairs with the

School Launch Real Estate: Agent & Investor pathway and the Real Estate License Exam Prep course.

A student cannot sign a contract, hold title or borrow until adulthood, so all of the analysis in this course is practice on real public listings and pretend purchases. That is exactly the point: the student who has analyzed a hundred properties by eighteen will recognize a good deal — and, more often, a bad one — when it is finally time to buy.

> Videos were chosen lesson by lesson and checked in preview for accuracy and content. Small-property investing is taught best by practitioners, so many lessons use established teaching channels — the BiggerPockets channel and podcast clips, longtime investor-educators, extension programs and government agencies such as the Consumer Financial Protection Bureau and HUD. Many of these teachers also sell books or services; their teaching was previewed and stands on its own, and nothing in this course requires buying anything. Prices, rents, interest rates, loan rules and tax figures in videos change and differ by place, so treat them as examples and run your own numbers.

Start with Lesson 1.1 →

Who it is for

Written for students in grades 10–12. The math is Algebra I: percents, rates, simple formulas and a spreadsheet. The School Launch Personal Finance & Investing course is a helpful companion, and the Real Estate: Agent & Investor pathway gives the career context, but neither is required. Students work fairly independently; a parent or mentor checks practice sets, reviews the deal binder, discusses the ethics and stewardship questions and serves on the capstone panel. Nothing in the course requires buying property, contacting sellers or signing anything; all research uses public listings and records, and any conversation with a real agent, lender, landlord or contractor happens with a parent present.

How to use this course

1. **The weekly rhythm.** Each lesson takes three sessions of about 50 minutes. Session 1: the warm-up, the video, the core ideas and the worked examples. Session 2: the project and the investor's notebook. Session 3: the practice set, checked against

the answers, with every miss corrected. Each unit ends with a test day; the midterm and final each get a review day. At five sessions a week the course fills a school year of about 33 weeks.

2. **Story, idea, numbers.** Read the core ideas in order: the story shows why the idea matters, the big idea defines it, the middle paragraphs work through the mechanics and the traps, and the last paragraph, "Run the numbers," shows how the idea appears in a real deal analysis.
3. **The Deal Analyzer.** The free Deal Analyzer is used all year. Learn each calculation by hand first, then let the tool do the arithmetic so you can study the decision. Print the filled-in worksheet for every deal you analyze, and use the blank worksheet to work deals on paper. Saved scenarios stay on your device; a copied link carries the whole deal.
4. **The deal binder.** Keep a binder (paper or digital) of every property you analyze: the listing, the rent and sale comparables, the printed worksheet and a one-paragraph verdict — buy, negotiate or walk away, and why. Aim for fifty by the end of the year. The binder is the course portfolio and the habit that matters most.
5. **Real listings, pretend purchases.** Use real public listings and county records so your numbers are real, but every purchase is pretend. Do not contact sellers, agents, lenders or landlords except with a parent present and permission, and never give out personal information online.
6. **Example numbers are examples.** Interest rates, prices, rents, loan rules, insurance costs and tax figures change every year and differ by place. Every such figure in the course is labeled an example. The methods are permanent; the numbers are not. Where state law matters — landlord–tenant rules, deposits, notices, rent limits — the lessons teach the common pattern and send you to your own state's official sources.
7. **Practice sets and tests.** Each lesson has twelve short-answer problems marked easy, medium, hard and challenge, many of them calculations. Unit tests, the midterm and the final are four-choice questions with the math worked out in the answers. Use a basic calculator.
8. **Picture study.** Each lesson has one public-domain painting, engraving or historic photograph — houses and streets, builders and landlords, homesteads and towns — chosen to open the lesson's theme.

9. **Stewardship, not speculation.** The course treats property as a trust: houses are homes for real families, tenants are neighbors to be served fairly, and debt is a serious obligation. It never promises quick or passive riches, and it shows the case for and against borrowing honestly so families can decide for themselves.
10. **Not advice.** The course teaches how investing, lending, landlording and taxes work. It does not tell any family what to buy, which loan to take or how to file taxes; for real decisions, consult a licensed professional.

Scope and sequence

UNIT 1 · WEEKS 1–4

The Investor's Foundations

Why rental property builds wealth slowly — cash flow, loan paydown, appreciation and tax treatment; what borrowing multiplies in both directions; the map of strategies small investors use, from buy-and-hold and house hacking to BRRRR, flips and short-term rentals; setting a goal that knows what "enough" is; and the team every investor needs.

1.1 Why Rental Property: The Four Ways Real Estate Pays

1.2 Leverage, Risk and the Borrower's Burden

1.3 The Strategy Map: Buy-and-Hold, House Hack, BRRRR, Flip and Short-Term Rental

1.4 Goals and Enough: How Many Doors, How Much Income

1.5 The Investor's Team

UNIT 2 · WEEKS 4–7

Markets, Neighborhoods and Comparables

Choosing where to invest — jobs, population, price-to-rent ratios and landlord law; reading a neighborhood and the tenants it attracts; estimating what a unit will really rent for from rent comparables; estimating after-repair value from sale comparables; and the landlord–tenant rules that differ from state to state, with the Pacific Northwest as the example.

2.1 Choosing a Market: Jobs, People and Price-to-Rent

2.2 Reading a Neighborhood: Property Classes and Tenant Demand

2.3 Rent Comps: What Will It Really Rent For?

2.4 Sale Comps and After-Repair Value

2.5 Landlord–Tenant Law Differs by State

UNIT 3 · WEEKS 7–10

Analyzing a Rental Deal

The heart of the course — income, vacancy and every operating expense including the capital expenditures beginners forget; net operating income, cash flow, cap rate, cash-on-cash return and DSCR; the 1%, 50% and 70% rules of thumb and where they mislead; and the full deal worksheet with a stress test, worked in the Deal Analyzer and by hand.

3.1 Income: Rent, Other Income and Vacancy

3.2 Expenses: The Full List, CapEx and Reserves

3.3 NOI, Cash Flow, Cap Rate and Cash-on-Cash

3.4 Rules of Thumb and Their Limits: 1%, 50% and 70%

3.5 The Full Deal Worksheet and the Stress Test

UNIT 4 · WEEKS 10–13

Financing the Small Investor

How small investors borrow — investment-property loans with their down payments, reserves and qualifying rules; owner-occupant loans on one to four units; DSCR loans, portfolio lenders and local banks; seller financing, private money and hard money with their real costs and risks; and refinancing, home-equity lines and the true cost of money.

4.1 Investment-Property Loans: Down Payments, Reserves and Qualifying

4.2 Owner-Occupant Loans on One to Four Units

4.3 DSCR Loans, Portfolio Lenders and Local Banks

4.4 Seller Financing, Private Money and Hard Money

4.5 Refinancing, HELOCs and the Cost of Money

UNIT 5 · WEEKS 13–17

House Hacking and Small Multifamily

The most proven first step for a young adult — living in one unit and renting the others; rent-by-the-room and the live-in flip; analyzing duplexes, triplexes and fourplexes; why five units and up is a different business valued by its income; and accessory dwelling units and other ways zoning can add value.

5.1 House Hacking: Living for Less While You Learn

5.2 Rent-by-the-Room and the Live-In Flip

5.3 Duplexes, Triplexes and Fourplexes

5.4 Five Units and Up: When Multifamily Becomes Commercial

5.5 Accessory Dwelling Units and Adding Value with Zoning

UNIT 6 · WEEKS 17–20

BRRRR and Value-Add

Buy, rehab, rent, refinance, repeat — finding deals on and off the market honestly; scoping and estimating a rehab line by line; managing contractors, permits and the budget; the refinance, the appraisal and how much cash stays in the deal; and the risks that make BRRRR harder than it sounds.

6.1 Finding Deals: On-Market, Off-Market and Honest Outreach

6.2 Scoping and Estimating the Rehab

6.3 Managing Contractors, Permits and the Budget

6.4 The Refinance: Appraisals, Seasoning and Cash Left In

6.5 Repeat? The Risks of BRRRR

UNIT 7 · WEEKS 20–23

Flips, Short-Term and Mid-Term Rentals

The other strategies — fix-and-flip math from after-repair value through holding and selling costs to profit; running a flip and its risks; short-term rentals with occupancy, average daily rate and local rules; mid-term furnished rentals; and one house analyzed five ways to see which strategy fits.

7.1 Fix-and-Flip Math: ARV, Holding Costs and Profit

7.2 Running a Flip: Timeline, Risk and Exit

7.3 Short-Term Rentals: Revenue, Occupancy and Rules

7.4 Mid-Term Rentals and Furnished Housing

7.5 One House, Five Strategies

UNIT 8 · WEEKS 24–27

Landlording and Property Management

Being a good landlord — fair housing and written, consistent tenant screening; leases, deposits and move-in; maintenance, turnovers and capital projects; rent collection, hard conversations and eviction only as a last resort; and deciding whether to manage yourself or hire a manager.

8.1 Fair Housing and Tenant Screening

8.2 Leases, Deposits and Move-In

8.3 Maintenance, Turnovers and Capital Projects

8.4 Rent Collection, Hard Conversations and Eviction as a Last Resort

8.5 Self-Manage or Hire a Manager

UNIT 9 · WEEKS 27–30

Taxes, Insurance and Protection

What the tax code and the insurance policy mean for a landlord — depreciation and the rental schedule; selling with capital gains, depreciation recapture and the home-sale exclusion; the 1031 exchange; insurance, umbrella policies and what an LLC does and does not protect; and bookkeeping that keeps a rental business honest.

9.1 Depreciation and the Rental Tax Return

9.2 Selling: Capital Gains, Recapture and the Home-Sale Exclusion

9.3 The 1031 Exchange

9.4 Insurance, Umbrellas and LLCs

9.5 Bookkeeping for Landlords

UNIT 10 · WEEKS 30–33

Building a Portfolio and the Capstone

Growing carefully — reserves and pacing before the next door; partners and private investors and the law that protects them; paying off debt versus growing, and two paths to a paid-off portfolio; hard lessons from deals that went wrong; and the capstone: analyze, defend and present a real deal.

10.1 Scaling: Reserves, Pacing and the Next Door

10.2 Partners, Private Investors and Doing It Honestly

10.3 Paying Off Debt or Growing: Two Paths to a Paid-Off Portfolio

10.4 Hard Lessons: Case Studies of Deals Gone Wrong

10.5 Capstone: Analyze, Defend and Present a Real Deal

Weekly pacing calendar

WEEK	PLAN
1	• Day 1: Lesson 1.1 Why Rental Property: The Four Ways Real Estate Pays: video, teaching and worked examples • Day 2: Lesson 1.1: project and notebook • Day 3: Lesson 1.1: practice set and corrections • Day 4: Lesson 1.2 Leverage, Risk and the Borrower’s Burden: video, teaching and worked examples • Day 5: Lesson 1.2: project and notebook *Five sessions a week of about 50 minutes. Families on a four-day week can combine the practice day of one lesson with the teaching day of the next.*
2	• Day 1: Lesson 1.2: practice set and corrections • Day 2: Lesson 1.3 The Strategy Map: Buy-and-Hold, House Hack, BRRRR, Flip and Short-Term Rental: video, teaching and worked examples

WEEK	PLAN
	• Day 3: Lesson 1.3: project and notebook • Day 4: Lesson 1.3: practice set and corrections • Day 5: Lesson 1.4 Goals and Enough: How Many Doors, How Much Income: video, teaching and worked examples
3	• Day 1: Lesson 1.4: project and notebook • Day 2: Lesson 1.4: practice set and corrections • Day 3: Lesson 1.5 The Investor's Team: video, teaching and worked examples • Day 4: Lesson 1.5: project and notebook • Day 5: Lesson 1.5: practice set and corrections
4	• Day 1: Unit 1 test • Day 2: Lesson 2.1 Choosing a Market: Jobs, People and Price-to-Rent: video, teaching and worked examples • Day 3: Lesson 2.1: project and notebook • Day 4: Lesson 2.1: practice set and corrections • Day 5: Lesson 2.2 Reading a Neighborhood: Property Classes and Tenant Demand: video, teaching and worked examples
5	• Day 1: Lesson 2.2: project and notebook • Day 2: Lesson 2.2: practice set and corrections • Day 3: Lesson 2.3 Rent Comps: What Will It Really Rent For?: video, teaching and worked examples • Day 4: Lesson 2.3: project and notebook • Day 5: Lesson 2.3: practice set and corrections
6	• Day 1: Lesson 2.4 Sale Comps and After-Repair Value: video, teaching and worked examples • Day 2: Lesson 2.4: project and notebook • Day 3: Lesson 2.4: practice set and corrections • Day 4: Lesson 2.5 Landlord–Tenant Law Differs by State: video, teaching and worked examples • Day 5: Lesson 2.5: project and notebook
7	• Day 1: Lesson 2.5: practice set and corrections • Day 2: Unit 2 test • Day 3: Lesson 3.1 Income: Rent, Other Income and Vacancy: video, teaching and worked examples

WEEK	PLAN
	• Day 4: Lesson 3.1: project and notebook • Day 5: Lesson 3.1: practice set and corrections
8	• Day 1: Lesson 3.2 Expenses: The Full List, CapEx and Reserves: video, teaching and worked examples • Day 2: Lesson 3.2: project and notebook • Day 3: Lesson 3.2: practice set and corrections • Day 4: Lesson 3.3 NOI, Cash Flow, Cap Rate and Cash-on-Cash: video, teaching and worked examples • Day 5: Lesson 3.3: project and notebook
9	• Day 1: Lesson 3.3: practice set and corrections • Day 2: Lesson 3.4 Rules of Thumb and Their Limits: 1%, 50% and 70%: video, teaching and worked examples • Day 3: Lesson 3.4: project and notebook • Day 4: Lesson 3.4: practice set and corrections • Day 5: Lesson 3.5 The Full Deal Worksheet and the Stress Test: video, teaching and worked examples
10	• Day 1: Lesson 3.5: project and notebook • Day 2: Lesson 3.5: practice set and corrections • Day 3: Unit 3 test • Day 4: Lesson 4.1 Investment-Property Loans: Down Payments, Reserves and Qualifying: video, teaching and worked examples • Day 5: Lesson 4.1: project and notebook
11	• Day 1: Lesson 4.1: practice set and corrections • Day 2: Lesson 4.2 Owner-Occupant Loans on One to Four Units: video, teaching and worked examples • Day 3: Lesson 4.2: project and notebook • Day 4: Lesson 4.2: practice set and corrections • Day 5: Lesson 4.3 DSCR Loans, Portfolio Lenders and Local Banks: video, teaching and worked examples
12	• Day 1: Lesson 4.3: project and notebook • Day 2: Lesson 4.3: practice set and corrections • Day 3: Lesson 4.4 Seller Financing, Private Money and Hard Money: video, teaching and worked examples

WEEK	PLAN
	• Day 4: Lesson 4.4: project and notebook • Day 5: Lesson 4.4: practice set and corrections
13	• Day 1: Lesson 4.5 Refinancing, HELOCs and the Cost of Money: video, teaching and worked examples • Day 2: Lesson 4.5: project and notebook • Day 3: Lesson 4.5: practice set and corrections • Day 4: Unit 4 test • Day 5: Lesson 5.1 House Hacking: Living for Less While You Learn: video, teaching and worked examples
14	• Day 1: Lesson 5.1: project and notebook • Day 2: Lesson 5.1: practice set and corrections • Day 3: Lesson 5.2 Rent-by-the-Room and the Live-In Flip: video, teaching and worked examples • Day 4: Lesson 5.2: project and notebook • Day 5: Lesson 5.2: practice set and corrections
15	• Day 1: Lesson 5.3 Duplexes, Triplexes and Fourplexes: video, teaching and worked examples • Day 2: Lesson 5.3: project and notebook • Day 3: Lesson 5.3: practice set and corrections • Day 4: Lesson 5.4 Five Units and Up: When Multifamily Becomes Commercial: video, teaching and worked examples • Day 5: Lesson 5.4: project and notebook
16	• Day 1: Lesson 5.4: practice set and corrections • Day 2: Lesson 5.5 Accessory Dwelling Units and Adding Value with Zoning: video, teaching and worked examples • Day 3: Lesson 5.5: project and notebook • Day 4: Lesson 5.5: practice set and corrections • Day 5: Unit 5 test
17	• Day 1: Review day for the midterm • Day 2: Midterm exam (50 questions, 90 minutes, one sitting) • Day 3: Lesson 6.1 Finding Deals: On-Market, Off-Market and Honest Outreach: video, teaching and worked examples • Day 4: Lesson 6.1: project and notebook

WEEK	PLAN
	• Day 5: Lesson 6.1: practice set and corrections
18	• Day 1: Lesson 6.2 Scoping and Estimating the Rehab: video, teaching and worked examples • Day 2: Lesson 6.2: project and notebook • Day 3: Lesson 6.2: practice set and corrections • Day 4: Lesson 6.3 Managing Contractors, Permits and the Budget: video, teaching and worked examples • Day 5: Lesson 6.3: project and notebook
19	• Day 1: Lesson 6.3: practice set and corrections • Day 2: Lesson 6.4 The Refinance: Appraisals, Seasoning and Cash Left In: video, teaching and worked examples • Day 3: Lesson 6.4: project and notebook • Day 4: Lesson 6.4: practice set and corrections • Day 5: Lesson 6.5 Repeat? The Risks of BRRRR: video, teaching and worked examples
20	• Day 1: Lesson 6.5: project and notebook • Day 2: Lesson 6.5: practice set and corrections • Day 3: Unit 6 test • Day 4: Lesson 7.1 Fix-and-Flip Math: ARV, Holding Costs and Profit: video, teaching and worked examples • Day 5: Lesson 7.1: project and notebook
21	• Day 1: Lesson 7.1: practice set and corrections • Day 2: Lesson 7.2 Running a Flip: Timeline, Risk and Exit: video, teaching and worked examples • Day 3: Lesson 7.2: project and notebook • Day 4: Lesson 7.2: practice set and corrections • Day 5: Lesson 7.3 Short-Term Rentals: Revenue, Occupancy and Rules: video, teaching and worked examples
22	• Day 1: Lesson 7.3: project and notebook • Day 2: Lesson 7.3: practice set and corrections • Day 3: Lesson 7.4 Mid-Term Rentals and Furnished Housing: video, teaching and worked examples • Day 4: Lesson 7.4: project and notebook • Day 5: Lesson 7.4: practice set and corrections

WEEK	PLAN
23	• Day 1: Lesson 7.5 One House, Five Strategies: video, teaching and worked examples • Day 2: Lesson 7.5: project and notebook • Day 3: Lesson 7.5: practice set and corrections • Day 4: Unit 7 test • Day 5: Lesson 8.1 Fair Housing and Tenant Screening: video, teaching and worked examples
24	• Day 1: Lesson 8.1: project and notebook • Day 2: Lesson 8.1: practice set and corrections • Day 3: Lesson 8.2 Leases, Deposits and Move-In: video, teaching and worked examples • Day 4: Lesson 8.2: project and notebook • Day 5: Lesson 8.2: practice set and corrections
25	• Day 1: Lesson 8.3 Maintenance, Turnovers and Capital Projects: video, teaching and worked examples • Day 2: Lesson 8.3: project and notebook • Day 3: Lesson 8.3: practice set and corrections • Day 4: Lesson 8.4 Rent Collection, Hard Conversations and Eviction as a Last Resort: video, teaching and worked examples • Day 5: Lesson 8.4: project and notebook
26	• Day 1: Lesson 8.4: practice set and corrections • Day 2: Lesson 8.5 Self-Manage or Hire a Manager: video, teaching and worked examples • Day 3: Lesson 8.5: project and notebook • Day 4: Lesson 8.5: practice set and corrections • Day 5: Unit 8 test
27	• Day 1: Lesson 9.1 Depreciation and the Rental Tax Return: video, teaching and worked examples • Day 2: Lesson 9.1: project and notebook • Day 3: Lesson 9.1: practice set and corrections • Day 4: Lesson 9.2 Selling: Capital Gains, Recapture and the Home-Sale Exclusion: video, teaching and worked examples • Day 5: Lesson 9.2: project and notebook
28	• Day 1: Lesson 9.2: practice set and corrections • Day 2: Lesson 9.3 The 1031 Exchange: video, teaching and worked examples • Day 3: Lesson 9.3: project and notebook

WEEK	PLAN
	• Day 4: Lesson 9.3: practice set and corrections • Day 5: Lesson 9.4 Insurance, Umbrellas and LLCs: video, teaching and worked examples
29	• Day 1: Lesson 9.4: project and notebook • Day 2: Lesson 9.4: practice set and corrections • Day 3: Lesson 9.5 Bookkeeping for Landlords: video, teaching and worked examples • Day 4: Lesson 9.5: project and notebook • Day 5: Lesson 9.5: practice set and corrections
30	• Day 1: Unit 9 test • Day 2: Lesson 10.1 Scaling: Reserves, Pacing and the Next Door: video, teaching and worked examples • Day 3: Lesson 10.1: project and notebook • Day 4: Lesson 10.1: practice set and corrections • Day 5: Lesson 10.2 Partners, Private Investors and Doing It Honestly: video, teaching and worked examples
31	• Day 1: Lesson 10.2: project and notebook • Day 2: Lesson 10.2: practice set and corrections • Day 3: Lesson 10.3 Paying Off Debt or Growing: Two Paths to a Paid-Off Portfolio: video, teaching and worked examples • Day 4: Lesson 10.3: project and notebook • Day 5: Lesson 10.3: practice set and corrections
32	• Day 1: Lesson 10.4 Hard Lessons: Case Studies of Deals Gone Wrong: video, teaching and worked examples • Day 2: Lesson 10.4: project and notebook • Day 3: Lesson 10.4: practice set and corrections • Day 4: Lesson 10.5 Capstone: Analyze, Defend and Present a Real Deal: video, teaching and worked examples • Day 5: Lesson 10.5: project and notebook
33	• Day 1: Lesson 10.5: practice set and corrections • Day 2: Unit 10 test • Day 3: Review day for the final • Day 4: Final exam (60 questions, two hours, one sitting) • Day 5: Capstone presentation to the panel (Lesson 10.5) and a review of the year's deal binder

Materials

The School Launch Deal Analyzer

Free at /courses/business/real-estate-investing/deal-analyzer/ — used in nearly every lesson. Works on a phone, tablet or computer, and prints worksheets.

A basic calculator

Work every formula by hand at least once before trusting a tool.

Investor's notebook and a deal binder

A bound notebook for definitions, formulas and corrected practice; a binder or folder for every analyzed deal.

Free spreadsheet software (Google Sheets or LibreOffice Calc)

Used in projects that build an amortization table, a rent roll, a rehab budget, a portfolio plan and a bookkeeping ledger.

Public listing websites and your county assessor and recorder sites

Free and public: real listings, sale prices (where disclosed), rents, tax assessments and recorded documents for practice analysis.

Optional: one of the books or resources listed in a unit

Never required. See the list in each unit.

Grading

Grades come from the practice sets, the projects, the investor's notebook and deal binder, the ten unit tests, the midterm and the final with its capstone. A calculation earns full credit when the formula, the substitution and the answer with units are all shown; a deal verdict earns full credit when it is defended with the numbers.

PART	%
Practice sets (completed and corrected)	15
Projects and the deal binder	25
Investor's notebook	10
Unit tests	25
Midterm exam (50 questions, timed)	10

PART	%
Final exam (60 questions) and capstone presentation	**15**

Scale: A 90–100, B 80–89, C 70–79, D 60–69, F below 60.

- Practice sets are graded for completion and correction: a problem missed, understood and reworked earns full credit.
- In the deal binder, walking away from a bad deal with a clear reason earns the same credit as finding a good one. The skill being graded is judgment, not optimism.
- The capstone (Lesson 10.5) is presented to a panel of at least two adults, who score it with the rubric in Unit 10.
- For a high-school transcript this course is one full credit of business or personal finance (career and technical education). Keep the deal binder, the projects and the capstone as the course portfolio.

A NOTE TO PARENTS

You do not need any real estate experience to run this course. Your jobs are to keep the rhythm, check practice sets, look through the deal binder each week and ask the student to defend one verdict aloud, discuss the stewardship questions at the table, and sit on the capstone panel. The Deal Analyzer does the arithmetic; your questions do the teaching.

Be clear-eyed about what this course does and does not do. It teaches the analysis small investors use, with real listings and pretend purchases. It does not encourage a teenager to buy property, borrow, or contact sellers; all of that waits for adulthood and for your family's own judgment. Where the course discusses borrowing, it presents the case for careful, limited debt and the case for no debt at all, and leaves the decision to you.

Real estate investing draws more hype than almost any field. The course names the warning signs — promises of fast or passive income, pressure to buy expensive programs, schemes that depend on misleading sellers or tenants — and teaches the

slower, honest path instead. Landlording is presented as service: providing safe, fair, well-kept homes to families.

Several projects work best with your help: comparing a real rental listing with your own family's housing costs, reading a real lease or insurance policy, or walking a neighborhood together. Nothing teaches like a real document read at the kitchen table.

Finally, enjoy it. A student who finishes this course will look at any house and see the numbers behind it — a skill that serves them whether they become a landlord, a homeowner or simply a wise neighbor. *Fabricando fit faber.*

UNIT 1

The Investor's Foundations

In 1866 a woman who had been born enslaved paid $250 of saved wages for two lots on the edge of a dusty California pueblo, and held them while Los Angeles grew up around her. Two generations earlier, one of the Revolution's heroes had sat in debtors' prison because his land could not pay his loans, while a patient New York fur trader bought Manhattan farmland he would hold for the rest of his life. This unit begins with them. You will learn the **four ways a rental pays — cash flow**, **principal paydown**, **appreciation** and **depreciation** — and why only the first is money you can spend. You will learn what **leverage** really does: a loan multiplies losses exactly as it multiplies gains, and the test of a good loan is whether the property earns more than the loan costs.

Then you will survey the **strategies** small investors use — buy-and-hold, house hacking, BRRRR, flipping, short- and mid-term rentals — and meet the four worksheets of the School Launch **Deal Analyzer**. You will write a goal measured in dollars of monthly income with a date and a reason, not in "doors," and you will think hard about what "enough" means. Finally you will assemble a paper team of the professionals an investor needs and learn to check their licenses, compare their bids and read their fees. Bring a calculator and an open mind; leave behind any promise of easy money.

PREREQUISITES

- Can compute percents, percent change and a simple average, and use a calculator's exponent key
- Can read a simple table and enter numbers into an online form or spreadsheet
- Has a bound investor's notebook and a binder or folder ready to become the deal binder
- Has read the course's how-to-use pages and the Deal Analyzer's opening page with a parent

MASTERY CHECKLIST

- ☐ I can name the four ways a rental pays, compute each for one year, and say which are spendable cash and which are paper wealth.
- ☐ I can compute annual depreciation for a residential rental using 27.5 years and a building basis that excludes land.
- ☐ I can compute the percent change in equity for a given change in value at any down payment and explain why leverage multiplies losses.
- ☐ I can compare a cap rate with a loan constant to tell positive from negative leverage, and compute a reserve target in months of PITI.
- ☐ I can describe buy-and-hold, house hacking, BRRRR, flipping and short- and mid-term rentals by how they pay, the capital and skill they need and their main risks.
- ☐ I can open the right Deal Analyzer worksheet for a strategy and explain what its default example shows.
- ☐ I can write a goal in dollars of monthly cash flow with a date, a reason and a risk limit, and compute the doors and capital it requires.
- ☐ I can name the members of an investor's team, verify a license, compare three bids on one scope,

and compare two management fee structures.

OPTIONAL BOOKS AND RESOURCES FOR THIS UNIT

- **School Launch Deal Analyzer**: Free. The four-worksheet calculator used in every lesson — Rental property, House hack, BRRRR and Fix & flip — with a 30-year projection, a stress test and printable worksheets. Use it from Lesson 1.1 onward. Ages 13 and up.
- **The Book on Rental Property Investing, by Brandon Turner (BiggerPockets Publishing)**: A printed book from the publisher's own store. A thorough, numbers-first guide to buying and holding rentals, by a longtime BiggerPockets host. Read the chapters on the four returns and on strategies alongside Lessons 1.1 and 1.3; a parent may want to preview the chapters on borrowing. Ages 15 and up.
- **Retire Early with Real Estate, by Chad Carson (BiggerPockets Publishing)**: A printed book from the publisher's own store. Carson shows how to set a goal from a family's real needs and reach it with a small number of rentals, including paying them off. Use it with Lesson 1.4. Ages 15 and up.
- **IRS Publication 527: Residential Rental Property**: Free and official. The IRS's own explanation of rental income, expenses and depreciation for residential rentals. Skim the depreciation section with Lesson 1.1; it returns in Unit 9. Education only, not tax advice. Ages 15 and up.
- **CFPB: Owning a Home**: Free and official. The Consumer Financial Protection Bureau's guide to mortgages, including how to compare Loan Estimates and what a pre-approval means. Use it with Lessons 1.2 and 1.5. Ages 14 and up.

Not required. Every project in this unit works without them. School Launch has no ties to these authors, publishers or companies.

LESSONS IN THIS UNIT

1.1	**Why Rental Property: The Four Ways Real Estate Pays**	3 sessions of 50 minutes
1.2	**Leverage, Risk and the Borrower's Burden**	3 sessions of 50 minutes
1.3	**The Strategy Map: Buy-and-Hold, House Hack, BRRRR, Flip and Short-Term Rental**	3 sessions of 50 minutes

1.4	**Goals and Enough: How Many Doors, How Much Income**	3 sessions of 50 minutes
1.5	**The Investor's Team**	3 sessions of 50 minutes

Unit 1 test

Closed notes, basic calculator only. Twenty four-choice questions, 5 points each, 100 points total. Allow about two minutes per question — set a timer for 40 minutes. Show the arithmetic for every calculation question on scratch paper. Choose the one BEST answer; aim for 80% (16 of 20) or better, and rework every miss. Figures marked "in this example" are examples — real prices, rents, rates and costs vary by place and year.

1. **5 pts**

   In this example, an investor buys a $400,000 rental with 20% down. If the value rises 5%, by what percent does her equity rise (ignore costs and paydown)?

   A. 5%

   B. 25%

   C. 20%

   D. 50%

2. **5 pts**

   Which of the four returns of a rental property can the owner spend this month without selling or borrowing?

   A. Appreciation

   B. Principal paydown

   C. Depreciation

   D. Cash flow

3. 5 pts

In this example, a rental costs $275,000, and the assessor values the land at $55,000. What is the annual depreciation?

A. $8,000

B. $10,000

C. $7,051

D. $5,641

4. 5 pts

A rental's cap rate is 6.0% and the proposed loan's constant is 7.6%. Compared with paying cash, the loan will:

A. Raise the cash-on-cash return because leverage always helps

B. Have no effect on the return

C. Lower the cash-on-cash return — negative leverage

D. Raise the cap rate

5. 5 pts

In this example, a family's goal is $3,600 a month of net rental cash flow, and each leveraged rental nets $300. How many doors are needed?

A. 10

B. 12

C. 18

D. 36

6. 5 pts

What is the main difference between a lender's pre-approval and a prequalification?

A. A pre-approval follows the lender's review of verified credit, income and assets; a prequalification is an estimate from stated information

B. A prequalification is a binding loan commitment

C. They are the same thing

D. A pre-approval is issued only after closing

7. 5 pts

Within how many business days of a mortgage application must a lender give the borrower a Loan Estimate?

A. One

B. Ten

C. Thirty

D. Three

8. 5 pts

A 23-year-old with $20,000 saved, a steady job and no landlord experience asks which strategy most experienced investors suggest first. The best answer is:

A. A fix-and-flip financed with hard money

B. A portfolio of short-term rentals in a resort town

C. A house hack with an owner-occupant loan, or one simple long-term rental

D. A BRRRR with a large rehab

9. 5 pts

Which statement about a fix-and-flip is correct?

A. It pays a one-time profit at sale and is generally taxed as ordinary income

B. It produces monthly passive income

C. It earns depreciation every year

D. It needs no exit plan if the ARV is right

10. 5 pts

In this example, a short-term rental averages $150 a night with 60% of nights booked. What is its annual revenue?

A. $54,750

B. $32,850

C. $27,000

D. $21,900

11. 5 pts

In this example, a BRRRR's all-in cost is $170,000, paid in cash. It appraises for $220,000, the lender refinances at 75% of value, and refinance closing costs are $4,000. How much cash is left in the deal?

A. $0

B. $5,000

C. $4,000

D. $9,000

12. 5 pts

In this example, a buyer puts 3.5% down on a $300,000 rental, and a year later values have fallen 5%. Ignoring paydown, the buyer:

A. Has gained equity because of principal paydown

B. Has exactly zero equity

C. Owes more than the house is worth — underwater by about $4,500

D. Can sell for a profit after costs

13. 5 pts

In this example, a rental's PITI is $1,800 and its other monthly operating costs average $200. What is a six-month reserve?

A. $10,800

B. $12,000

C. $24,000

D. $1,200

14. 5 pts

Which part of a rental property is never depreciated?

A. The land

B. The roof

C. The furnace

D. The building's walls

15. 5 pts

An investor buys with an adjustable-rate loan that resets in five years, planning to refinance before then. Which risk is she most exposed to?

A. Concentration risk

B. Appraisal risk only

C. Interest-rate risk

D. No risk, because she plans to refinance

16. 5 pts

Three bids for the same roof arrive: $11,500 and $12,400 from licensed, insured roofers, and $6,900 from a contractor not found on the state license lookup who wants 60% up front in cash. The wisest choice is to:

A. Take the low bid and save money

B. Split the job among all three

C. Pay the low bidder only after the work is done

D. Reject the low bid and choose between the licensed bids after checking references and scope

17. 5 pts

Two property managers quote 8% and 10% of collected rent. Before choosing the 8% manager, an investor should:

A. Compare the whole agreements — leasing, renewal and maintenance-markup fees — on the same rental

B. Choose the lower percent; it is always cheaper

C. Ask the seller which manager to use

D. Remove management from the Deal Analyzer

18. 5 pts

Which is the most useful investing goal?

A. “Own 50 doors as fast as possible.”

B. “Get rich from real estate someday.”

C. “By age 45, $4,000 a month of net rental cash flow with no more than 50% loan-to-value, so a parent can be home.”

D. “Buy whatever my agent recommends.”

19. 5 pts

Over many years, rents rise with inflation while a 30-year fixed principal-and-interest payment stays the same. As a result:

A. The rental's property taxes and insurance stay the same too

B. The loan balance grows

C. Cash flow is guaranteed to rise every year

D. The gap between rent and the loan payment tends to widen, though taxes, insurance and repairs also rise

20. 5 pts

In this example, an owner must sell a $250,000 rental quickly, and selling costs are 8% of the price. How much of the equity is consumed by selling costs?

A. $8,000

B. $20,000

C. $25,000

D. $2,000

ANSWER KEY

1. B. Equity is $80,000; the gain is $400,000 × 0.05 = $20,000; $20,000 ÷ $80,000 = 25%. A (5%) is the change in the property's value, not in her equity.
2. D. Only cash flow is spendable now. Appreciation and principal paydown build equity reached by selling or refinancing; depreciation is a tax deduction.
3. A. Building basis $275,000 − $55,000 = $220,000; $220,000 ÷ 27.5 = $8,000. B depreciates the land too; C and D use 39 years, the nonresidential life.
4. C. When the loan constant exceeds the cap rate, each borrowed dollar costs more than it earns, so borrowing lowers the return on cash. Financing never changes the cap rate (D), which ignores debt.
5. B. $3,600 ÷ $300 = 12 doors. The lesson's point is that the same goal might be met by far fewer paid-off houses.
6. A. Pre-approval rests on verified documents and is the stronger conditional commitment. A prequalification commits the lender to nothing (B is wrong).
7. D. Three business days. Comparing Loan Estimates from several lenders is the simplest way to compare rates and closing costs.
8. C. A house hack needs the least capital and teaches landlording while living on site; a simple rental teaches every core number. Flips and BRRRR reward skills a beginner lacks, and short-term rentals depend on changing local rules.
9. A. A flip is a job of work that pays once; profits are generally ordinary income. It is not passive (B), the owner does not hold it long enough to depreciate it as a rental (C), and it always needs a backup exit, usually renting (D).
10. B. $150 × 365 × 0.60 = $32,850. A assumes every night is booked; revenue is not profit, since cleaning, fees, utilities and taxes must still be subtracted.
11. D. Loan $220,000 × 0.75 = $165,000; cash out $165,000 − $4,000 = $161,000; left in $170,000 − $161,000 = $9,000. B forgets the closing costs.
12. C. Loan $289,500; value $285,000; she is $4,500 underwater before selling costs, which make the hole deeper.
13. B. 6 × ($1,800 + $200) = $12,000. A leaves out the operating costs.
14. A. Land does not wear out and is never depreciated; the building and its components are, over 27.5 years for residential rentals.
15. C. If rates are higher at the reset or a refinance is not available, her payment can rise sharply. A plan that depends on refinancing at good rates is a bet, not a certainty.

16. D. An unlicensed contractor demanding large cash deposits is a warning sign whatever the price. Compare the licensed bids on the same written scope and call their references.
17. A. Leasing and markup fees can make the lower percent the more expensive manager. Never remove management from the analysis (D).
18. C. It states dollars, a date, a risk limit and a reason. A measures doors, which rewards buying more rather than buying well.
19. D. Fixed-rate debt lets rising rents widen the margin over the payment, but expenses rise too and rents can stall, so cash flow is not guaranteed (C).
20. B. $\$250{,}000 \times 0.08 = \$20{,}000$. Illiquidity is a real cost; a quick sale can consume several years of appreciation.

PORTFOLIO PIECE: THE DEAL BINDER — FOUNDATIONS

Open your deal binder with the five pieces of this unit: the Four Returns Sheet for a real listing with its first year split into cash flow, principal paydown, appreciation and depreciation at 3% and 0% appreciation (1.1); the Leverage Ladder table running one house at four down payments with loan constants, equity swings and reserve targets, and your family discussion paragraph (1.2); the One House, Four Worksheets first look with its strategy comparison table (1.3); your Ten-Year Goal page with its dollars, date, reason, risk limits and payoff timeline (1.4); and your Paper Team sheet with license-lookup notes, a labeled Loan Estimate and a management-fee comparison (1.5).

Every analysis page ends with a printed Deal Analyzer worksheet and a one-paragraph verdict — buy, negotiate to a stated price, or walk away. Date every page and write the source of every input (listing, comps, assessor, quote) beside it.

LOOK FOR	WHAT IT MEANS
Four returns	All four returns are computed correctly for a real listing, land is excluded from depreciation, both appreciation cases are shown, and the verdict names which return the deal depends on.
Leverage ladder	Four down payments are run with correct cash flow, cash-on-cash, DSCR, loan constants and equity swings; positive and negative leverage are labeled correctly and reserves are computed.
Strategy map	The same listing is entered in all four worksheets, the comparison table is complete and accurate, and the verdict fits a beginner's capital and skill.
Goal page	The goal is in net dollars with a date, a reason and risk limits; doors and capital are computed for both a leveraged and a paid-off path; the timeline uses honest assumptions.
Paper team	Every role is described with the input it supplies, license lookups are recorded from official sources without private information, and the fee comparison is computed correctly.
Records and judgment	Pages are dated, every input has a source, worksheets are printed, and verdicts are defended with numbers — walking away with a clear reason earns full credit.

1.1 Why Rental Property: The Four Ways Real Estate Pays

OBJECTIVES

- Name and define the four ways a rental property pays its owner — cash flow, loan paydown, appreciation and tax treatment — and tell which are spendable cash and which are paper wealth.
- Compute first-year principal paydown, a year of appreciation and annual straight-line depreciation for a residential rental.
- Split one rental's first-year total return into its four parts and express the total as a percent of the cash invested.
- Explain how inflation and fixed-rate debt widen the gap between rent and the mortgage payment over time, and what still rises with inflation.
- Describe why real estate is illiquid, local and management-intensive, and why investors judge it over a long time horizon.

> **Warm-up.** Your family pays something every month to live where you live — rent or a mortgage. In five minutes, write down where you think each dollar of that payment ends up: whose pocket, and for what. Then guess: if your family owned the house and rented it to someone else, in how many different ways could that house make money for you? List as many as you can.

WATCH

DON'T Chase Cash Flow: 4 Ways to Make Money in Real Estate

BiggerPockets · 22:36

https://www.youtube.com/watch?v=Tw2HFOyli14

> **WHEN TO WATCH**
> Watch after the third core idea. The teacher works one rental's four returns on a whiteboard; pause at each section and write his number for cash flow, appreciation, debt paydown and depreciation, then compare his split with Worked Example 1. Skip the short promotional segments.

BACKUP VIDEO

The 5 Profit Centers of a Rental Property You NEED to Know | Rental Property Investing 101

Ali Boone REI Coaching · 8:48

https://www.youtube.com/watch?v=4axfYg7xZhI

A shorter second pass before the practice set: she lists the profit centers of a rental one at a time — note that she counts more than four by splitting some apart, and match each of hers to one of our four.

KEY TERMS

cash flow

The money left each month or year after a rental's income pays every operating expense and the mortgage payment; the only one of the four returns you can spend now.

net operating income (NOI)

A property's effective gross income minus its operating expenses, before any mortgage payment; the income the property itself produces.

amortization

The repayment of a loan by level payments that each cover the month's interest and retire part of the principal, so the balance falls to zero by the end of the term.

principal paydown

The part of each mortgage payment that reduces the loan balance, increasing the owner's equity; also called loan paydown or debt paydown.

equity

The owner's share of a property's value: market value minus all loans against it.

market appreciation

An increase in a property's value caused by the market — rising demand, incomes, rents or inflation — rather than by the owner's work; never guaranteed.

forced appreciation

An increase in value the owner creates by improving the property or its income, such as renovating, adding a bedroom or raising rents to market.

depreciation (tax)

A yearly deduction that recovers the cost of a building (never the land) over its tax life — 27.5 years, straight-line, for residential rental property.

total return

The sum of a property's cash flow, principal paydown, appreciation and tax benefit for a period, often stated as a percent of the cash invested.

liquidity

How quickly and cheaply an asset can be turned into cash; real estate is illiquid because selling takes months and costs a large share of the price.

time horizon

The number of years an investor expects to hold an asset; rental property is usually judged over ten years or more.

CORE IDEAS

The story. Bridget "Biddy" Mason was born into slavery in 1818 and walked behind her owner's wagons across the continent, first to Utah and then to southern California. In California she went to court, and in January 1856 a Los Angeles judge declared her and her family free. She went to work as a nurse and midwife, saved her wages for a decade, and on November 28, 1866, paid $250 for two lots on the dusty edge of the little pueblo, bounded by Spring, Fort (now Broadway), Third and Fourth Streets. She told her children the land was their homestead, and the family lived in a two-story wooden house she put there. Los Angeles grew toward her lots. In 1875 she sold the north half alone for $1,500 — six times what she had paid for the whole — and in later years the family's Spring Street land held commercial buildings.

She gave generously; the First African Methodist Episcopal Church of Los Angeles traces its founding in 1872 to a meeting in her home. Her ledger was simple: buy what you can pay for, hold it through the years, let it serve your family, and let a growing town do the rest.

How they figured it out. For most of American history, a house paid its owner in only two ways: the rent it brought in and whatever it sold for someday. Home loans before the 1930s were usually short — often five to ten years — with interest-only payments and the whole balance due at the end, so borrowers built no equity by paying. During the Depression, federal programs spread the long, level-payment, fully **amortizing** loan, in which every payment retires a little principal; that turned each mortgage payment into a forced savings plan and created a third return. The fourth came from the tax law. The federal income tax of 1913 allowed owners of business property a reasonable deduction for wear and tear, and the Tax Reform Act of 1986 set today's rule: residential rental buildings are depreciated in equal amounts over 27.5 years. Practical investors — and in our own time the BiggerPockets community — learned to name all four and to add them up, because judging a rental by any single one of them gives the wrong answer.

The big idea. A rental property can pay its owner in four ways. **Cash flow** is what is left after the rent pays every operating expense and the mortgage — the only return you can spend this month. **Principal paydown** is the slice of each payment that lowers the loan balance; the tenant's rent is quietly buying you the house. **Appreciation** is growth in value — **market appreciation** from the economy around you, or **forced appreciation** you create by improving the property or its income. **Tax treatment**, chiefly **depreciation**, is a paper deduction for the building's wear that can shelter some or all of the cash flow from income tax. Add the four for a year and you have the **total return**. Only the first is cash; the other three are wealth you can touch only by selling, refinancing or filing a return. A sound rental pays in all four ways and does not need any one of them to survive.

Cash flow has a quiet partner: **inflation** working against a fixed-rate loan. Rents tend to rise over decades with wages and prices, while a 30-year fixed principal-and-interest payment never changes. In this example, a house rents for $2,000 a month with a principal-and-interest payment of $1,098. If rent grows 3% a year, the year-10 rent is about $2,610, and the gap between rent and the loan payment widens from $902 to about $1,512. That widening is why many owners who start with thin cash

flow end with strong cash flow — and why a paid-off rental can support a family. But be honest about the rest of the ledger: property taxes, insurance, repairs and replacement costs rise with inflation too, rents can stall or fall for years in a weak local economy, and an adjustable-rate loan can rise instead of standing still.

Appreciation deserves the most caution. **Market appreciation** is real over long periods in many places, but it is uneven, local and never promised; values can fall for years, as they did across much of the country after 2006. **Forced appreciation** is more within your control: in this example, buying a dated house for $180,000, spending $30,000 on a kitchen, bath and paint, and owning a house worth $240,000 creates $30,000 of value beyond your cost. Depreciation works differently from both. Only the building is depreciated — **land is never depreciated** — so an investor separates the two, often using the county assessor's ratio. In this example, a $220,000 rental with 80% of its assessed value in the building has a depreciable basis of $176,000, and $176,000 ÷ 27.5 = $6,400 a year is deducted. That deduction reduces taxable rental income but is generally recaptured and taxed when the property is sold (Unit 9). IRS Publication 527 explains the rules; this course teaches how they work, not how any family should file.

Real estate is also a different kind of asset from a stock or a savings account, and the differences belong in your thinking. It is **illiquid**: selling commonly takes months and costs, in this example, 6–10% of the price in commissions, closing costs and repairs, so on a $300,000 house about $24,000 at 8%. It is **local**: your house rises or falls with one town's jobs and one street's reputation. It is **management-intensive**: furnaces fail on holidays, tenants move, and someone must answer the phone. It is **lumpy**: you cannot sell a bedroom when you need cash. These traits are why rental property rewards a long **time horizon** — ten years or more — and punishes anyone who must sell in a hurry. They are also why total return matters: a property earning 2% in cash flow may still earn 8–12% a year in total, or may lose money if values fall.

Run the numbers. Open the Rental worksheet of the Deal Analyzer. The cards at the top show cash flow and cash-on-cash return; scroll to the projection table and you will find the other returns: the value column (appreciation), the loan balance column (principal paydown), and a "total return" column that adds equity gained to all cash flow, before selling costs and taxes. Depreciation is not in the tool — you compute it by hand. A careful investor runs the projection twice: once with appreciation at 3% and once at 0%, and buys only if the 0% version still works. The

classic mistakes: counting appreciation as cash flow (“it will be worth more, so the negative cash flow is fine”); treating principal paydown as money you can spend; assuming the tax benefit is the same for every owner; forgetting that selling costs eat several years of appreciation; and judging a deal by one return instead of all four.

PICTURE STUDY



Portrait of Biddy Mason, Unknown photographer, 1860s · Photograph · UCLA Library, Miriam Matthews Photograph Collection, Los Angeles

Image: Wikimedia Commons, public domain

This photograph of Bridget "Biddy" Mason was made in the 1860s, around the years she was saving her wages as a nurse and midwife and buying her Spring Street lots. The photographer is unknown; the picture survives in a collection of Los Angeles history gathered by the librarian Miriam Matthews. It opens this lesson because behind every rental is an owner, and this owner's patience — a decade of saving, then decades of holding — shows what ownership can do for a family when it is bought with real money and held through the years.

Look closely

- Look at her face and posture. What does the photographer's plain background let you notice about her?
- Notice the dress: simple, dark, carefully buttoned, with one small ornament at the collar. What does it suggest about how she spent and saved?
- Old photographs took long exposures and cost money. Why might a working woman pay for a portrait like this in the 1860s?
- Compare this picture with what you know of her story: freedom won in court, wages saved, land bought and held. Which part of the story do you see in her expression?

Talk about it

1. Biddy Mason paid $250 for land that later sold for many times that. Which of the four returns made that possible, and which did she enjoy every day she lived there?
2. Why might a person who had once owned nothing value owning land so highly?
3. Mason gave generously from what she owned and opened her home for church meetings. How does Proverbs 24:27 — first the field, then the house — show up in the order of her life?

PROJECT

The Four Returns Sheet

You will take one real single-family listing in your county and see all four of its returns. Choose a modest house (two or three bedrooms) that a family might rent. You will estimate the rent from a few nearby rental listings, run the house in the Deal Analyzer's Rental worksheet, and then split its first year into cash flow, principal paydown, appreciation and depreciation by hand. The purchase is pretend; do not contact the agent or seller.

This sheet becomes the first page of your **deal binder**, the record of every property you analyze this year.

You will need

- One real for-sale listing and three nearby rental listings for similar homes
- Your county assessor's page for the listing (for taxes and the land/building split)
- The School Launch Deal Analyzer, Rental worksheet
- Calculator, investor's notebook and a binder or folder

Steps

1. Record the listing's address (street name only), price, beds, baths, square feet and year built. From the assessor's site, record the annual property tax and the assessed land and building values.
2. Estimate monthly rent as the middle of your three rental listings and write down all three with their asking rents.
3. In the Rental worksheet, enter the price, your rent estimate and the taxes; leave the other inputs at their defaults (25% down, 7% rate, 6% vacancy, 6% repairs, 7% CapEx, 9% management). Write down NOI, annual cash flow and cash invested.
4. From the projection table, record the year-1 loan balance and compute first-year principal paydown (starting loan minus year-1 balance).
5. Compute appreciation at 3% and at 0%, and depreciation using the assessor's building ratio and 27.5 years.

6. Build a four-row table — cash flow, principal paydown, appreciation, tax deduction — and total it twice (3% and 0% appreciation). Express each total as a percent of cash invested.
7. Print the filled-in Rental worksheet and write a one-paragraph verdict — buy, negotiate to a stated price, or walk away — explaining which of the four returns this house depends on. File both in your deal binder.

INVESTOR'S NOTEBOOK

1. Make four flashcards — cash flow, principal paydown, appreciation, depreciation — each with its definition, one formula and the words SPENDABLE or PAPER.
2. Draw a four-layer bar for the worked example's first year, labeling each layer with its dollar amount, and a second bar with appreciation at 0%.
3. Write a trap list titled "Four Returns" ending with: Appreciation is not cash flow, and land is never depreciated.

KEY FORMULAS

$$\text{Total return} = \text{cash flow} + \text{principal paydown} + \text{appreciation} + \text{tax benefit}$$

$$\text{Annual cash flow} = \text{NOI} - \text{annual debt service}$$

$$\text{Principal paid in a month} = \text{payment} - \text{balance} \times \frac{\text{annual rate}}{12}$$

$$\text{Annual depreciation} = \frac{\text{building basis (not land)}}{27.5 \text{ years}}$$

$$\text{Value after } n \text{ years} = \text{price} \times (1 + g)^n$$

$$\text{Total return on cash} = \frac{\text{total return}}{\text{cash invested}}$$

From history. Biddy Mason's Spring Street land stood in what became the heart of downtown Los Angeles. Today a small memorial park near the site holds a concrete wall about eighty feet long, by the artist Sheila Levrant de Bretteville, that traces her life decade by decade from 1810 to 1900 — including an image of the freedom papers a Los Angeles court approved in January 1856. Her story is now a public lesson in how patient ownership of a modest lot, bought with saved wages, can bless a family for generations.

Example 1. In this example, you buy a single-family rental for $220,000 with 25% down, $5,000 of closing costs and $3,000 of upfront repairs, with a 30-year loan at 7%. Rent is $2,000 a month; taxes $2,400 a year; insurance $1,200; vacancy 6%; repairs 6% and CapEx 7% of rent; management 9% of collected rent. The Rental worksheet shows NOI of $13,810, debt service of $13,173 and first-year principal paydown of $1,676. Assume 3% appreciation, a building basis of $176,000, and — only for this example — a 20% tax rate on the deduction. Split the first-year total return into its four parts.

Show solution

1. Cash invested: $\$55{,}000 + \$5{,}000 + \$3{,}000 = \$63{,}000$.
2. Cash flow: $\$13{,}810 - \$13{,}173 = \$637$ for the year (about $53 a month).
3. Principal paydown: $1,676 (from the worksheet). Appreciation: $\$220{,}000 \times 0.03 = \$6{,}600$.
4. Tax benefit: depreciation $\$176{,}000 \div 27.5 = \$6{,}400$; at the example 20% rate, $\$6{,}400 \times 0.20 = \$1{,}280$.
5. Total: $\$637 + \$1{,}676 + \$6{,}600 + \$1{,}280 = \$10{,}193$, or $\$10{,}193 \div \$63{,}000 \approx 16.2\%$.

Answer: About $10,193, or 16.2% of the cash invested — but only $637 of it is spendable cash. Without appreciation the total is $3,593, about 5.7%. The worksheet's projection shows $8,913 for year 1 because it leaves out the tax benefit.

Example 2. In this example, a rental's rent is $2,000 a month and its fixed principal-and-interest payment is $1,098. If rent grows 3% a year (the Rental worksheet's rent-growth input), what is the year-10 rent, and how much has the monthly gap between rent and the loan payment grown?

Show solution

1. Year 10 is nine raises after year 1: $\$2{,}000 \times 1.03^{9}$.
2. $1.03^{9} \approx 1.3048$, so year-10 rent $\approx \$2{,}610$.
3. Gap in year 1: $\$2{,}000 - \$1{,}098 = \$902$. Gap in year 10: $\$2{,}610 - \$1{,}098 = \$1{,}512$.
4. Growth in the gap: $\$1{,}512 - \$902 = \$610$ a month.

Answer: Year-10 rent is about $2,610, and the gap has grown by about $610 a month — before taxes, insurance and repairs, which also rise and must be subtracted to find true cash flow.

Example 3. Stress test the first example. Suppose that instead of rising 3%, the house's value falls 5% in year 1. Recompute the first-year total return.

Show solution

1. Appreciation becomes a loss: $\$220{,}000 \times (-0.05) = -\$11{,}000$.
2. The other three parts are unchanged: cash flow $637, principal $1,676, tax benefit $1,280.
3. Total: $\$637 + \$1{,}676 + \$1{,}280 - \$11{,}000 = -\$7{,}407$.
4. On cash: $-\$7{,}407 \div \$63{,}000 \approx -11.8\%$.

Answer: A loss of about $7,407 on paper (−11.8%). The owner who can keep paying and keep holding loses nothing real unless forced to sell; the owner with no reserves and thin cash flow may be forced to sell at the bottom. That is why the course judges deals on cash flow and reserves first.

PRACTICE

1. Easy Name the four ways a rental property can pay its owner.

Show answer

Cash flow, principal (loan) paydown, appreciation (market and forced) and tax treatment, chiefly depreciation. Their sum for a period is the total return.

2. Easy Which of the four returns can you spend this month without selling or borrowing?

Show answer

Only cash flow. Principal paydown and appreciation build equity you reach only by selling or refinancing, and the tax benefit shows up when you file.

3. Easy Over how many years is a residential rental building depreciated, and what part of the property is never depreciated?

Show answer

27.5 years, straight-line. Land is never depreciated because it does not wear out.

4. Medium In this example, a rental costs $300,000 and the assessor values the land at $60,000. Find the annual depreciation.

Show answer

Building basis $\$300{,}000 - \$60{,}000 = \$240{,}000$; $\$240{,}000 \div 27.5 \approx \$8{,}727$ a year.

5. Medium In this example, a $200,000 loan at 7% for 30 years has a monthly principal-and-interest payment of $1,330.60. How much of the first payment is principal?

Show answer

Interest is $\$200{,}000 \times 0.07 \div 12 = \$1{,}166.67$, so principal is $\$1{,}330.60 - \$1{,}166.67 = \$163.93$. Early payments are mostly interest; the principal share grows each month.

6. Medium In this example, a $250,000 house appreciates 3% a year. What is it worth after 1 year and after 10 years?

Show answer

After 1 year, $\$250{,}000 \times 1.03 = \$257{,}500$. After 10 years, $\$250{,}000 \times 1.03^{10} \approx \$335{,}979$ — a gain of about $85,979, if the 3% actually happens.

7. Medium In this example, an investor buys a dated house for $180,000, spends $30,000 on improvements, and comparable renovated houses sell for $240,000. How much value did she force?

Show answer

$240,000 − ($180,000 + $30,000) = $30,000 of forced appreciation beyond her cost — before holding, financing and selling costs, which Units 6 and 7 add.

8. Hard In this example, a rental's first year shows cash flow $1,200, principal paydown $2,100, appreciation of 2% on a $300,000 value and a tax benefit of $1,500, on $80,000 of cash invested. Find the total return on cash with and without appreciation.

Show answer

Appreciation is $6,000; total $1,200 + $2,100 + $6,000 + $1,500 = $10,800, or 13.5%. Without appreciation, $4,800, or 6.0%. The second number is the one you can count on.

9. Hard A seller's flyer says, "Small negative cash flow, but appreciation will make you rich." Explain in two or three sentences why a careful investor rejects that reasoning.

Show answer

Appreciation is not cash and is not promised; the negative cash flow is certain and must be paid every month from your own pocket. If values stall or fall, or if a large repair comes, the owner may be forced to sell at a loss. A sound deal survives with appreciation at zero.

10. Hard In this example, an owner has $90,000 of equity in a $300,000 rental and must sell. Selling costs are 8%. How much equity does the owner actually receive, before taxes?

Show answer

Selling costs $300,000 × 0.08 = $24,000, so the owner nets about $90,000 − $24,000 = $66,000 — illiquidity costs more than a quarter of the equity here.

11. **Challenge** In this example, rent is $1,800 a month and the fixed P&I is $1,200. If rent grows 3% a year, what is the rent after ten raises, and what is the new gap? Name two costs that also rise.

    Show answer

    $\$1{,}800 \times 1.03^{10} \approx \$2{,}419$; the gap grows from $600 to about $1,219. Property taxes and insurance (and repairs and CapEx) also rise, so true cash flow grows less than the gap.

12. **Challenge** In this example, Deal A has $3,600 a year of cash flow on $60,000 invested and appreciates 1% on a $200,000 value; Deal B has zero cash flow on $60,000 invested and appreciates 4% on $300,000. Compare first-year returns (ignore principal and taxes), then compare them if appreciation is zero.

    Show answer

    A: $\$3{,}600 + \$2{,}000 = \$5{,}600$ (9.3%); B: $12,000 (20%). With no appreciation A still earns 6% and B earns 0% — and if values fall 5%, B loses $15,000. B is a bet on the market; A is a business.

COMMON MISTAKES

- Counting appreciation as cash flow. Appreciation is paper wealth until you sell or refinance; only cash flow pays bills.
- Treating principal paydown as spendable money. It builds equity, which is locked in the house until a sale or refinance.
- Depreciating the land. Only the building is depreciated, over 27.5 years for residential rentals; separate land from building first.
- Forgetting that depreciation is generally recaptured and taxed at sale. It defers and reduces tax; it is not free money.
- Judging a deal by one return. A strong total return built mostly on hoped-for appreciation is weaker than a modest one built on cash flow.
- Ignoring selling costs and time. Illiquidity can consume several years of appreciation if you must sell quickly.

Make it a game · Four Pockets. Draw four boxes on a sheet of paper labeled CASH FLOW, PRINCIPAL, APPRECIATION and TAX. One player reads a card describing a year ("Rent rose, the furnace died, values flat"); every player writes a dollar amount in each box from the rental in Worked Example 1, adjusting for the card, and totals the year. Closest to the parent's answer key scores a point; anyone who puts appreciation money into the CASH FLOW box loses a point. Play five years and see whose rental survived.

Scripture. "Prepare thy work without, and make it fit for thyself in the field; and afterwards build thine house." (Proverbs 24:27, KJV)

Solomon puts first things first: build the field that feeds you before the house that shelters you. A rental is judged the same way — first by whether its income carries it, and only then by the wealth it might build. Biddy Mason worked and saved for a decade before she bought her lots.

1.2 Leverage, Risk and the Borrower's Burden

OBJECTIVES

- Compute the percent change in equity caused by a change in property value at different down payments, and explain why leverage multiplies losses as well as gains.
- Compare a property's cap rate with its loan constant to decide whether a loan creates positive or negative leverage.
- Calculate a reserve fund in months of PITI and estimate the cost of a vacant month on a highly leveraged property.
- Identify interest-rate, concentration, liquidity, vacancy and repair risk in a deal and describe a protection for each.
- Present fairly the case for careful, limited debt and the case for buying rental property with cash, and state your family's own reasoning.

> **Warm-up.** Imagine two friends each buy a $300,000 house. One pays cash; the other puts $15,000 down and borrows the rest. Next year both houses are worth 10% less. In five minutes, write how much each friend has lost in dollars, and what fraction of the money they put in is gone. Who is in more trouble, and why?

WATCH

What happens when housing depreciates | Housing | Finance & Capital Markets | Khan Academy

Khan Academy · 9:09

https://www.youtube.com/watch?v=QA2TBiIsdT0

> **WHEN TO WATCH**
> Watch after the big idea. Sal Khan shows what a fall in home prices does to a buyer's equity when most of the house is borrowed; copy his numbers and redo them for the 5%-down buyer in Worked Example 1.

BACKUP VIDEO

What Is The Right Way To Buy Rental Property?

The Ramsey Show Highlights · 3:06

https://www.youtube.com/watch?v=eH5lvuxvdCk

Watch after the sixth core idea for the cash-only view of buying rentals. Write his conditions for buying a rental in one sentence each, then write one sentence on where you agree or disagree and why.

KEY TERMS

leverage

Using borrowed money to control a larger asset than your own cash could buy, which magnifies both gains and losses on your equity.

loan-to-value ratio (LTV)

The loan balance divided by the property's value, stated as a percent; 80% LTV means a 20% equity cushion.

loan constant

Annual debt service divided by the loan amount; the yearly cost of each borrowed dollar, including principal.

positive leverage

Borrowing at a loan constant below the property's cap rate, so the loan raises the return on the owner's cash.

negative leverage

Borrowing at a loan constant above the property's cap rate, so the loan lowers the return on the owner's cash.

PITI

A loan's monthly principal, interest, property taxes and insurance — the common measure of a housing payment.

reserves

Cash set aside, often stated in months of PITI and operating expenses, to carry a property through vacancies and repairs.

underwater (negative equity)

The condition of owing more on a property than it is worth.

foreclosure

The legal process by which a lender takes and sells a property to recover a loan the borrower has failed to repay.

interest-rate risk

The danger that rising rates raise the payment on an adjustable or balloon loan or prevent a planned refinance.

concentration risk

The danger of having most of one's wealth in one property, one town or one employer's market.

CORE IDEAS

The story. Robert Morris of Philadelphia signed the Declaration of Independence and, as Superintendent of Finance from 1781, kept the young nation's army fed and paid when the treasury was empty. By the 1790s he was among the richest men in America — and he turned to land. With partners he bought millions of acres across several states and hundreds of lots in the new federal city, paying largely with borrowed money and promissory notes, and in February 1795 he helped form the North American Land Company to sell it all to settlers and European buyers. The buyers did not come fast enough. Interest kept running while the land sat unsold; notes came due that he could not pay; creditors sued. On February 16, 1798, the man who had financed a revolution walked into Philadelphia's Prune Street debtors' prison. He stayed there until August 1801, released only after Congress passed the nation's first bankruptcy law, and he died a few years later in modest circumstances.

His land was real; his debts were simply larger and faster than his land's ability to pay them.

How they figured it out. Every generation of lenders and borrowers has relearned Morris's lesson, and each crisis left rules behind. After the 1930s, lenders favored long, fully amortizing loans with real down payments, so equity grew instead of shrinking. After the housing crash that began in 2006–2007, the federal **Ability-to-Repay** rule took effect on January 10, 2014, requiring lenders to make a reasonable, good-faith judgment that a borrower can repay most consumer home loans, using verified income and debts. Careful investors built their own rules on top: a real **equity cushion** (commonly 20–25% down on rentals), **reserves** measured in months of payments, a **debt service coverage ratio** of at least about 1.2–1.25 (Unit 3), fixed-rate loans where possible, and the habit of buying only what still works if rents dip and repairs come early. None of these rules removes risk. They are the guardrails left by people who drove off the road.

The big idea. Leverage means using borrowed money to control more property than your cash alone could buy. It works like a lever because a change in the property's value lands entirely on your slice of it — your **equity** — while the loan balance stays put. In this example, on a $300,000 house a 10% rise in value adds $30,000. Paid in cash, that is a 10% gain on $300,000. With 20% down, it is a 50% gain on $60,000. With 5% down, it is a 200% gain on $15,000. Now run the same house 10% down: the cash buyer loses 10%; the 20%-down buyer loses half her equity; the 5%-down buyer loses all of it and is **underwater** by $15,000. Leverage does not make a property better or worse. It makes the owner's result larger in both directions, and it adds a payment that must be made every month whatever the market does. Proverbs says it plainly: "the borrower is servant to the lender."

Leverage helps only when the loan costs less than the property earns. Compare the property's **cap rate** — its net operating income divided by its price — with the loan's **loan constant**, the annual principal-and-interest payment divided by the loan amount. In this example, a 30-year loan at 7% has a constant of about 7.98%. A house with a cap rate of 8.29% earns 8.07% on cash if bought outright; with 75% financing at 7% its cash-on-cash return rises only to 8.32% — slim **positive leverage**. At 6% (constant 7.19%) the same deal earns about 10.5% on cash. At 8% (constant 8.81%) it falls to about 6.1%: **negative leverage**, where the loan makes the owner's return worse. Many deals in high-priced markets have cap rates of 5–6% while loans cost 7–

8% a year, which is why they lose money monthly and depend on appreciation. The test takes thirty seconds: if the cap rate is below the loan constant, the debt is hurting your cash return.

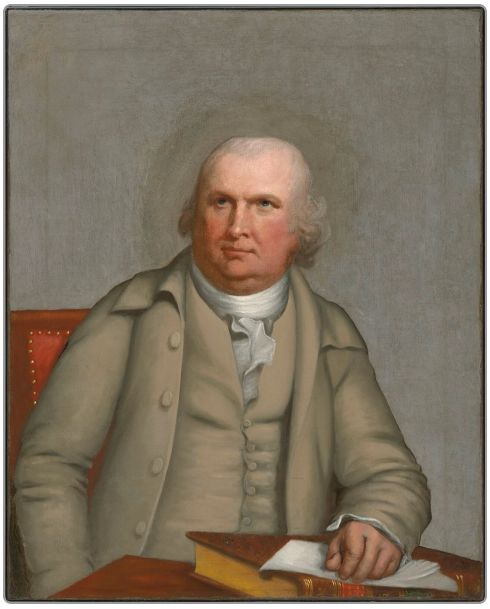
The years after 2006 showed leverage at scale. Home prices nationally fell roughly a quarter from their 2006 peak to their 2012 low, and far more in some metro areas. Millions of families lost homes to foreclosure. Among investors, those hurt worst had the same profile: little money down, adjustable or interest-only loans, negative monthly cash flow covered from a paycheck, many properties in one booming town, and no reserves. When jobs disappeared and loan payments rose, they could neither sell (they were underwater) nor wait (they had no cash). Investors with fixed-rate loans, positive cash flow and reserves mostly kept their properties, collected rent through the downturn, and recovered. The lesson is not that borrowing is always wrong; it is that the risks below must be measured before buying, not after: **interest-rate risk** on adjustable or balloon loans, **concentration risk** in one town or employer, **liquidity risk** when you must sell quickly, and the ordinary risks of vacancy, big repairs and a tenant who stops paying.

Reserves are the borrower's shock absorber. A common rule of thumb is six months of PITI and operating expenses per property, more for older buildings; lenders set their own minimums (Unit 4). In this example, a $250,000 rental bought with 5% down carries P&I of $1,580, mortgage insurance of $150 and taxes and insurance of $342 a month — $2,072 in all — so six months is about $12,432. One vacant month with $150 of utilities and $1,000 of cleaning and paint costs that owner about $3,222, and because the rent of $2,100 barely covers the payment, there is no monthly surplus to refill the account. The same house with 25% down has a payment of about $1,589 and earns back a vacant month in about seven months. Honest families also weigh the other path. Dave Ramsey and many others teach buying rentals only with cash, after the family home is paid off: growth is slower, but no lender can ever take the property, and a bad year means less income rather than ruin. Others hold that modest, fixed-rate debt with large down payments, strong cash flow and deep reserves lets ordinary families own property decades sooner. Both views are held by wise people. This course teaches you to run the numbers both ways; your family decides.

Run the numbers. Leverage lives in the Rental worksheet's purchase-and-loan inputs. Change only the down payment — 100%, 25%, 10% — and watch four results

move together: cash flow falls, cash-on-cash may rise or fall, DSCR falls, and break-even occupancy rises. Compare the cap-rate card with the loan constant you compute by hand (12 × P&I ÷ loan). Then use the stress-test table: “Rate +1 point” shows interest-rate risk on a refinance or adjustable loan, and “Vacancy +5 points” shows how thin the margin is. Write your reserve target on the printed worksheet. The classic mistakes: assuming leverage always raises returns (check the loan constant); counting on appreciation to rescue negative cash flow; buying with no reserves because “it will rent right away”; using an adjustable or balloon loan without a plan for higher rates; and owning every property in one town that depends on one employer.

PICTURE STUDY



Robert Morris, Robert Edge Pine, c. 1785 · Oil on canvas · National Portrait Gallery, Smithsonian Institution, Washington, D.C.

Image: Wikimedia Commons, public domain

Robert Edge Pine was an English painter who came to Philadelphia in the 1780s to paint the leaders of the new republic, and Robert Morris — the financier who had kept the Revolution supplied — was one of his sitters. Pine shows him at the height of his success, prosperous and calm, his hand on a paper beside a ledger-like book. A dozen years later the same man would be in debtors' prison. The painting opens this lesson because it shows a borrower at the moment before the burden came due.

Look closely

- Look at Morris's hand on the paper. What kind of papers would a financier sign — and what promises might they contain?
- Notice the closed book under the paper. Why might the painter include a book in the portrait of a man of business?
- Study his expression and posture. Does he look like a man worried about his debts?
- Notice how plain the background is. Everything points to the man and his papers. What is the painter saying about where Morris's power came from?

Talk about it

1. If Morris's papers were promissory notes for land, what would happen when they came due and the land had not sold?
2. Which kinds of risk in this lesson — leverage, liquidity, concentration — best describe Morris's downfall?
3. Proverbs says the borrower is servant to the lender. How can a person keep a promise to pay and still remain free in his heart and choices?

PROJECT

The Leverage Ladder

You will take one real rental listing and run it at four different down payments to see exactly what leverage does — to cash flow, to returns, to safety — and then write your own family's view on debt after discussing it with a parent.

The purchase is pretend. Your goal is to see the same house through the eyes of a cash buyer and three borrowers.

You will need

- One real single-family or duplex listing and your rent estimate from three rental listings
- The Deal Analyzer, Rental worksheet
- A spreadsheet or a four-column table in your notebook
- A parent for the discussion in step 7

Steps

1. Enter the listing in the Rental worksheet with your rent estimate, real property taxes and default expense percents.
2. Run it four times, changing only the down payment: 100%, 25%, 10% and 5% (add $150 a month of mortgage insurance at 10% and 5%). For each, record monthly cash flow, cash-on-cash return, DSCR and break-even occupancy.
3. For each version compute the loan constant by hand (12 × P&I ÷ loan) and compare it with the cap rate. Label each row positive or negative leverage.
4. For each version compute the equity change if the value falls 10%, and mark any version that would be underwater.
5. Compute a six-month reserve (PITI plus mortgage insurance plus one-twelfth of other annual expenses) for each version.
6. Print the 25% and 5% worksheets and attach your table.
7. Discuss with a parent the case for careful limited debt and the case for paying cash. Write one paragraph stating which down payment, if any, you

would accept on this house and why — or walk away — and file it in your deal binder.

INVESTOR'S NOTEBOOK

1. Flashcards: leverage, LTV, loan constant, positive leverage, negative leverage, PITI, reserves, underwater.
2. Draw a seesaw with a $30,000 value change on one end and three fulcrum positions labeled 100%, 20% and 5% down, writing the equity swing at each.
3. Trap list "Leverage": ending with — If the cap rate is below the loan constant, the loan is lowering my return.

KEY FORMULAS

$$\text{Equity} = \text{value} - \text{loan balance}$$

$$\%\ \text{change in equity} = \frac{\text{change in value}}{\text{starting equity}}$$

$$\text{LTV} = \frac{\text{loan balance}}{\text{value}}$$

$$\text{Loan constant} = \frac{12 \times \text{monthly P\&I}}{\text{loan amount}}$$

$$\text{Cap rate} > \text{loan constant} \Rightarrow \text{positive leverage}; \quad \text{cap rate} < \text{loan constant} \Rightarrow \text{negative leverage}$$

$$\text{Reserve target} = \text{months} \times (\text{PITI} + \text{MI} + \text{monthly operating costs})$$

From history. Robert Morris began building a grand Philadelphia mansion in the 1790s, designed by Pierre L'Enfant, the planner of Washington, D.C. Its costs ran far beyond plan, work stopped as his fortunes collapsed, and the unfinished shell — nicknamed "Morris's Folly" — was later torn down and the land sold. The same city that watched him enter debtors' prison watched his half-built house stand empty, a picture in brick of Luke 14: he began to build and was not able to finish.

Example 1. In this example, three buyers each purchase a $300,000 house: one with 100% cash, one with 20% down, one with 5% down. Find each buyer's percent change in equity if the value rises 10%, and if it falls 10%. Ignore costs and principal paydown.

Show solution

1. Change in value either way: $\$300{,}000 \times 0.10 = \$30{,}000$.
2. Cash buyer: equity $300,000; $\$30{,}000 \div \$300{,}000 = \pm 10\%$.
3. 20% down: equity $60,000; $\$30{,}000 \div \$60{,}000 = \pm 50\%$.
4. 5% down: equity $15,000; $\$30{,}000 \div \$15{,}000 = \pm 200\%$. After a 10% fall the house is worth $270,000 against a loan of $285,000.

Answer: ±10%, ±50% and ±200%. The 5%-down buyer is $15,000 underwater after a 10% decline and cannot sell without bringing cash to closing.

Example 2. In this example, a rental earns NOI of $12,433 on a $150,000 price (cap rate 8.29%). Bought with 25% down, $4,000 of closing costs and a 30-year loan, is the leverage positive or negative at 6%, 7% and 8%? (Loan constants: 7.19%, 7.98%, 8.81%.)

Show solution

1. All cash: $\$12{,}433 \div \$154{,}000 \approx 8.07\%$ cash-on-cash.
2. Loan $112,500; cash invested $\$37{,}500 + \$4{,}000 = \$41{,}500$.
3. At 6%: debt service $8,094; cash flow $4,339; $\$4{,}339 \div \$41{,}500 \approx 10.5\%$. Cap 8.29% > constant 7.19%: positive.
4. At 7%: debt service $8,982; cash flow $3,452; about 8.3%. Barely positive.
5. At 8%: debt service $9,906; cash flow $2,528; about 6.1%. Cap 8.29% < constant 8.81%: negative.

Answer: Positive at 6%, barely positive at 7%, negative at 8%. Enter the deal in the Rental worksheet and change only the interest rate to watch cash-on-cash cross the all-cash 8.07%.

Example 3. In this example, the same $250,000 rental is owned two ways. Owner A put 5% down: P&I $1,580, mortgage insurance $150, taxes and insurance $342. Owner B put 25% down: P&I $1,247, no mortgage insurance, same $342. Rent is $2,100; small repairs average $100 a month. Find each owner's monthly cash surplus, the cost of one vacant month ($150 utilities, $1,000 turnover), and a six-month reserve.

Show solution

1. Monthly payment: A $\$1{,}580 + \$150 + \$342 = \$2{,}072$; B $\$1{,}247 + \$342 = \$1{,}589$.
2. Surplus while rented: A $\$2{,}100 - \$2{,}072 - \$100 = -\$72$; B $\$2{,}100 - \$1{,}589 - \$100 = \$411$.
3. Vacant month: A $\$2{,}072 + \$150 + \$1{,}000 = \$3{,}222$; B $\$1{,}589 + \$1{,}150 = \$2{,}739$. B earns it back in $\$2{,}739 \div \$411 \approx 6.7$ months; A never does.
4. Six-month reserve: A $6 \times \$2{,}072 = \$12{,}432$; B $6 \times \$1{,}589 = \$9{,}534$.

Answer: Owner A loses money every month and one vacancy costs about $3,222 with nothing to refill reserves; Owner B recovers a vacancy in under seven months. High leverage turns ordinary events into emergencies.

PRACTICE

1. Easy Define leverage in one sentence.

   Show answer

   Using borrowed money to control a larger asset than your own cash could buy, which magnifies gains and losses on your equity.

2. Easy In this example, a house is worth $400,000 and the loan balance is $320,000. Find the equity and the LTV.

   Show answer

   Equity $80,000; LTV $\$320{,}000 \div \$400{,}000 = 80\%$.

3. Easy What do the letters PITI stand for?

   Show answer

   Principal, interest, taxes and insurance — the monthly housing payment lenders and investors measure.

4. **Medium** In this example, an investor puts 25% down on a $200,000 house. If the value falls 8%, what percent of her equity is lost?

   Show answer

   Equity $50,000; loss $16,000; $16,000 ÷ $50,000 = 32%. With 25% down, leverage is 4 to 1, so an 8% drop in value is a 32% drop in equity.

5. **Medium** In this example, a $160,000 loan has P&I of $1,011.31 a month. Find the loan constant.

   Show answer

   $12 \times \$1{,}011.31 = \$12{,}135.72$; $\$12{,}135.72 \div \$160{,}000 \approx 7.58\%$.

6. **Medium** A property's cap rate is 6.3% and the loan constant is 7.98%. Will borrowing raise or lower the cash-on-cash return compared with paying cash? Explain.

   Show answer

   Lower it — negative leverage. Each borrowed dollar costs 7.98% a year in payments but earns only 6.3% in the property, so the loan eats into the return on the owner's cash.

7. **Medium** In this example, PITI is $1,900 and other monthly operating costs average $250. Find a six-month reserve.

   Show answer

   $6 \times (\$1{,}900 + \$250) = \$12{,}900$.

8. **Hard** In this example, a buyer puts 3.5% down on a $300,000 house and must sell after values fall 5%. Selling costs are 8% of the sale price. How much cash must she bring to closing? (Ignore principal paydown.)

   Show answer

   Loan $289,500; sale price $285,000; costs $22,800; net proceeds $262,200. Shortfall $\$289{,}500 - \$262{,}200 = \$27{,}300$ she must bring in cash.

9. Hard Name three features shared by the investors hurt worst in the years after 2006, and one protection against each.

Show answer

Little money down (protection: a real equity cushion, commonly 20–25%); adjustable or interest-only loans (fixed-rate, fully amortizing loans); negative cash flow and no reserves (buy only cash-flowing deals and hold months of reserves). Concentration in one booming town is a fourth.

10. Hard In this example, a rental with 25% down earns $350 a month of surplus. A tenant leaves and the unit sits empty one month, costing $1,700 in payments plus $1,300 in turnover. How many months of surplus does that one vacancy erase?

Show answer

Cost $3,000; $3,000 ÷ $350 ≈ 8.6 months. One vacancy can erase most of a year's cash flow, which is why vacancy belongs in every analysis.

11. Challenge Summarize, fairly and in two sentences each, the case for buying rentals only with cash and the case for careful, limited borrowing.

Show answer

Cash: growth is slower, but no lender can foreclose, every month's rent is income, and a bad year means less income rather than ruin. Careful borrowing: fixed-rate debt with large down payments, positive cash flow and deep reserves lets an ordinary family own income property decades sooner while inflation erodes the real cost of the loan.

12. Challenge Robert Morris owned real land of real value and still went to debtors' prison. Using the vocabulary of this lesson, explain why.

Show answer

His debts required cash payments on a schedule while his land produced little income and could not be sold quickly — a liquidity and leverage problem, not a land problem. He was concentrated in unsold land, had no reserves, and his creditors' deadlines came before buyers did.

COMMON MISTAKES

- Assuming leverage always raises returns. It raises the return on cash only when the property's cap rate exceeds the loan constant.

- Thinking a small down payment means small risk. A 5% equity cushion disappears with a 5% price decline.
- Counting on appreciation to cover negative cash flow. The payment is certain; the appreciation is not.
- Buying with no reserves. Vacancies, turnovers and big repairs are normal events, not emergencies, when reserves exist.
- Ignoring interest-rate risk on adjustable, interest-only or balloon loans, or a plan that depends on refinancing later at a good rate.
- Owning everything in one town or one employer's market. Concentration turns one local layoff into a portfolio crisis.

Make it a game · The Leverage Dice. Each player picks a down payment card — 100%, 25% or 5% — on the same $300,000 pretend house. Roll one die each year: 1 = values fall 10%, 2 = a $4,000 repair, 3 = a vacant month, 4–5 = a normal year, 6 = values rise 10%. Track equity and a reserve account (start with $10,000). Anyone whose reserves hit zero in a bad year must sell at the current value minus 8%. After six rolls, compare who ended with the most equity — and who survived.

Scripture. "The rich ruleth over the poor, and the borrower is servant to the lender." (Proverbs 22:7, KJV)

Solomon does not say borrowing is a sin; he says it changes who you serve. A loan is a promise to pay every month whether the house is rented or empty, so the wise borrower borrows little, keeps reserves and keeps every promise. Some faithful families choose never to borrow for investments at all.

1.3 The Strategy Map: Buy-and-Hold, House Hack, BRRRR, Flip and Short-Term Rental

OBJECTIVES

- Define buy-and-hold, house hacking, BRRRR, fix-and-flip, and short- and mid-term rentals, and state how each makes money — ongoing cash flow or a lump sum.
- Compare the strategies by capital needed, time and skill required, risk and tax treatment, using a prose comparison table.
- Explain honestly why no rental is truly passive and which strategies are the most active.
- Match each strategy to the correct Deal Analyzer worksheet and run one example in each of the four worksheets.
- Explain why beginners usually start with a house hack or a simple long-term rental, and defend a first strategy for a given person.

> **Warm-up.** Picture one ordinary three-bedroom house on your street. In five minutes, write down every way you can think of that someone could make money from it — renting it, living in part of it, fixing it, selling it, renting it by the night. Next to each idea, write whether the money would come every month or all at once.

WATCH

6. Buy & Hold, BRRRR, or Flip? Real Estate Strategies Explained

Financial Blueprint · 14:48

https://www.youtube.com/watch?v=hs6aS9T-ekg

> **WHEN TO WATCH**
> Watch after the fourth core idea. As he describes buy-and-hold, BRRRR and flipping, fill in a three-row table: how it pays, capital needed and main risk. Treat his mentions of passive income with this lesson's caution.

BACKUP VIDEO

What Is House Hacking? (Beginner Real Estate Investing Strategy)

Karlton Dennis · 9:18

https://www.youtube.com/watch?v=PREK0tEazlE

Watch before the project for a focused look at house hacking. Write down the down-payment and occupancy points he makes and check them against Unit 4 later; skip any mention of his paid services.

KEY TERMS

buy-and-hold

Buying a property to rent it out for many years, earning cash flow, loan paydown, appreciation and tax benefits.

BRRRR

Buy, rehab, rent, refinance, repeat: buying a property below its fixed-up value, improving it, renting it, and refinancing on the new appraised value to recover cash for the next purchase.

house hacking

Living in one unit or bedroom of a property you own and renting the rest, so tenants pay much of your housing cost.

fix-and-flip

Buying a property that needs work, renovating it and reselling it for a one-time profit.

after-repair value (ARV)

The estimated market value of a property after planned repairs, based on recent sales of comparable renovated homes.

mid-term rental (MTR)

Furnished housing rented for a month or more, often to traveling workers or families relocating, usually under landlord–tenant law.

exit strategy

The planned way to end or change an investment — sell, refinance, rent, or convert — including a backup if the first plan fails.

short-term rental (STR)

Furnished lodging rented by the night or week, commonly for stays under 30 days, usually subject to local permits and lodging taxes.

active vs. passive investing

Active investing requires the owner's ongoing work and decisions; passive investing does not, and no directly owned rental is truly passive.

capital

The cash an investor must commit to a deal, including down payment, closing costs, repairs and reserves.

CORE IDEAS

The story. John Jacob Astor came to America from Germany in 1784 with little more than a few musical instruments to sell, and he made his first fortune in the fur trade. But he watched New York City creep northward up Manhattan Island, and from around 1799 he began buying farmland just beyond the edge of town. In 1803 he bought a farm of roughly seventy acres north of the city — land that is now around Times Square — for a price reported at about $25,000. His method was patient and consistent: buy land where the city would grow, almost never sell it, and lease lots for long terms to people who built their own houses and shops on them, paying Astor ground rent year after year. When the Panic of 1837 forced others to sell, he bought. He did not flip, and he rarely built; he held. When he died in 1848 he was widely reckoned the richest man in the United States, and most of that wealth was in Manhattan real estate. Astor chose one strategy that fit his capital, his patience and his city — and he stuck to it.

How they figured it out. The strategies small investors use today are old. Families in American cities ran boarding houses and built two-flats with the owners upstairs and tenants below long before anyone called it house hacking; builders bought run-

down houses, fixed them and sold them in every century. What changed in our time is that ordinary investors began comparing notes in public. The BiggerPockets forum, founded in 2004, became a place where thousands of small landlords posted real deals, real numbers and real mistakes, and the community gave short names to the patterns that kept working: **house hacking** for living in part of your rental, **BRRRR** for buy, rehab, rent, refinance, repeat. Books followed — Craig Curelop's *The House Hacking Strategy*, David Greene's *Buy, Rehab, Rent, Refinance, Repeat* — each laying out one path with its numbers and its traps. The names are new; the arithmetic is the same arithmetic Astor did.

The big idea. Every strategy is a different answer to three questions: how does the money come (a stream or a lump), how much capital and skill does it need, and what can go wrong. **Buy-and-hold** earns all four returns slowly from a rented property. **House hacking** is buy-and-hold while you live there, usually with an owner-occupant loan and a small down payment, so tenants carry much of your housing cost. **BRRRR** buys a property below its **after-repair value**, renovates it, rents it and refinances to pull much of the cash back out for the next one. A **fix-and-flip** renovates and resells for a one-time profit — a job, not an income stream, and generally taxed as ordinary income. **Short-term rentals** rent furnished lodging by the night; **mid-term rentals** rent furnished housing by the month. The strategies are tools. The right one depends on the person, the money and the market — and the wrong one can ruin a good person in a good market.

Think of the comparison as a table you could draw. Buy-and-hold needs a moderate amount of capital (commonly 20–25% down plus closing costs and reserves on an investor loan), modest skill, and steady attention; its risks are vacancy, repairs and leverage, and it pays monthly. A house hack needs the least capital — owner-occupant loans can allow small down payments, as of 2026 commonly 3.5–5% on some programs (Unit 4) — and some social skill, because your tenants are your neighbors; its cost is privacy and being on call. BRRRR needs the most capital up front (often cash or short-term loans for the purchase and rehab), the most skill (estimating repairs, managing contractors, predicting appraisals), and carries rehab, appraisal and rate risk. A flip needs capital and skill like BRRRR plus selling skill; it carries market risk during the hold and pays once. Short-term rentals need furnishing money, hospitality work and rule-checking; their revenue is higher and far more variable. Mid-term rentals sit between.

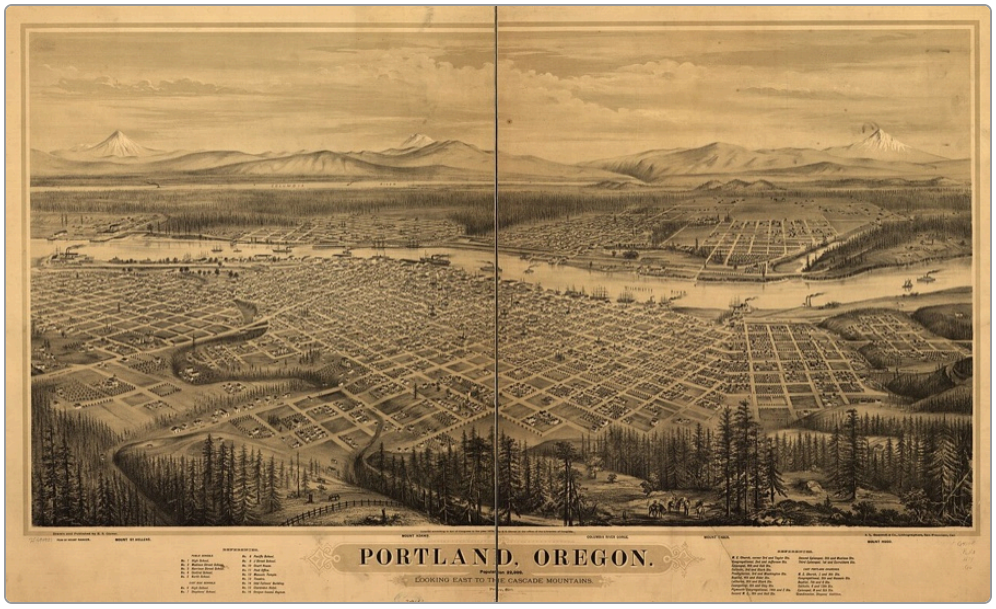
Be honest about the word **passive**. Owning a rental directly is never passive: someone must screen tenants, collect rent, answer the midnight call about a leak, and decide whether the roof can last another year. Hiring a property manager reduces the work but not the responsibility; you still choose the manager, read the statements and pay for the new roof. Flips are a part-time job with a deadline; short-term rentals are a small hotel. Anyone selling "passive income" from rentals is selling something. That honesty is also why most experienced investors tell beginners to start with a **house hack** or one simple long-term rental. A house hack lets you learn landlording with small capital while living close enough to fix things yourself, and a single long-term rental teaches every number in this course. BRRRR and flips reward skill a beginner does not yet have, and short-term rentals depend on local rules that can change. Start small, start simple, and learn the numbers before you add complexity.

Every strategy also needs an **exit strategy** and a backup. A flip that will not sell may have to become a rental — so a careful flipper runs the Rental worksheet before buying. A BRRRR whose appraisal comes in low leaves more cash in the deal, so it must still cash-flow on a smaller loan. A short-term rental banned by a new city ordinance must work as a long-term rental. A house hacker who moves out must see whether the property cash-flows with every unit rented and a manager paid. In this example, the same house rents long-term for $1,900 a month ($22,800 a year) or short-term at an average nightly rate of $160 with 55% of nights booked: $160 \times 365 \times 0.55 = \$32{,}120$. The short-term revenue is higher, but cleaning, platform fees, supplies and furnishings, owner-paid utilities, lodging taxes and heavier management can close the gap or reverse it. Strategy changes the inputs; it never changes the need to run the numbers.

Run the numbers. The Deal Analyzer has a worksheet for each main strategy: **Rental property** for buy-and-hold (and, with converted revenue and higher expenses, for short- and mid-term rentals in Unit 7); **House hack** for living in one unit; **BRRRR** for buy, rehab, rent, refinance; and **Fix & flip**. Open each one with its default example numbers and notice that the defaults are honest: the default rental loses about $66 a month, the default house hack costs about $199 a month more than renting before counting principal, the default BRRRR leaves $12,000 in the deal and cash-flows only about $13 a month, and the default flip's price is $26,000 over the 70% rule. The classic mistakes: choosing a strategy because it is exciting rather than because it fits

your capital and skill; analyzing a property in only one worksheet; skipping the backup exit; and calling any of them passive.

PICTURE STUDY



Portland, Oregon, Looking East to the Cascade Mountains, E. S. Glover (Eli Sheldon Glover), 1879 · Lithograph (bird's-eye view) · Library of Congress, Geography and Map Division
Image: Wikimedia Commons, public domain

Eli Sheldon Glover was one of the traveling artists who drew "bird's-eye views" of American towns in the 1870s and 1880s, imagining the town as a bird would see it and drawing every street and building. Towns bought these prints to attract settlers and investors. This view shows Portland when it held roughly 22,000 people, with the river trade in front and empty blocks and forest at its edges. It opens this lesson because it is a strategy map: the built center, the streets half filled, the open land at the edge — each a different kind of opportunity calling for a different plan.

Look closely

- Find the busy river front with its steamboats. What kinds of buildings stand closest to the water, and why?
- Look at the edges of the city where the grid of streets runs into empty blocks and forest. Who might buy land there, and what would they be betting on?
- Compare the dense blocks near the center with the scattered houses farther out. Where would a landlord, a builder and a patient land-holder each look first?
- Find the mountains on the horizon. The artist drew them large. Why would a town want buyers to see them?

Talk about it

1. If you were John Jacob Astor looking at this view, where would you buy, and what would you do with the land?
2. Which parts of this city would suit a long-term rental, which a fix-and-flip, and which a house hack for a young family?
3. Jesus told of a builder who counts the cost before building. How does looking at a whole map before choosing a plan help a person count the cost?

PROJECT

One House, Four Worksheets (First Look)

You will choose one real listing — ideally a small house or a duplex that needs some cosmetic work — and enter it, roughly, in all four Deal Analyzer worksheets. You are not trying to get every number right yet; you are learning what each strategy asks you to know.

In Lesson 7.5 you will return to this idea with full skill. Today's goal is a map.

You will need

- One real listing (photos help) and three nearby rental listings
- Three recent nearby sales of renovated homes, if your listing site shows sold prices
- The Deal Analyzer: Rental, House hack, BRRRR and Fix & flip worksheets
- Notebook and the deal binder

Steps

1. Record the listing's price, size, condition notes from the photos and your rent estimate.
2. Rental worksheet: enter price, rent and taxes; record monthly cash flow and cash needed.
3. House hack worksheet: treat one bedroom or unit as yours (if a duplex, one unit); record your monthly cost to live there versus renting.
4. BRRRR worksheet: guess a rehab budget from the photos and an ARV from the renovated sales; record cash left in the deal.
5. Fix & flip worksheet: use the same rehab and ARV; record profit and the 70% rule maximum offer.
6. Make a five-column table (strategy, cash needed, how it pays, main risk, skill needed) for the four worksheets plus short-term rental, which you describe in words.

7. Print the strongest worksheet and write a verdict paragraph: which strategy, if any, fits this house and a beginner like you — buy, negotiate to a stated price, or walk away. File it in the deal binder.

INVESTOR'S NOTEBOOK

1. Flashcards for each strategy: name, how it pays (stream or lump), capital needed, main risk, Deal Analyzer worksheet.
2. Draw a strategy map: a two-axis grid with capital needed across the bottom and skill needed up the side, and place the six strategies on it.
3. Trap list "Strategies": ending with — No rental is passive; every flip needs a rental backup.

KEY FORMULAS

$$\text{STR annual revenue} = \text{average daily rate} \times 365 \times \text{occupancy}$$

$$\text{Flip profit} = \text{ARV} - \text{total cost}$$

$$\text{BRRRR cash left in} = \text{cash in} - (\text{refinance loan} - \text{short-term payoff} - \text{refinance closing})$$

$$\text{House-hack monthly cost} = \text{P\&I} + \text{MI} + \text{fixed costs} + \text{repair/CapEx saving} - \text{other units' rent after vacancy}$$

From history. When John Jacob Astor died in 1848, he left money for a free public reference library in New York — the Astor Library, which opened in 1854 and later joined other collections to form the New York Public Library. The man who held Manhattan land for decades left behind something every New Yorker could use without paying rent: a reminder that what we build up through patient ownership can also be given away.

Example 1. Compare the capital each Deal Analyzer default example requires. In this example: Rental — $250,000 price, 25% down, $5,000 closing, $5,000 repairs. House hack — $300,000, 3.5% down, $7,500 closing. BRRRR — all-in cost $202,000 paid in cash, refinanced at 75% of a $260,000 ARV with $5,000 closing. Flip — cash in $53,719.

Show solution

1. Rental: $\$62{,}500 + \$5{,}000 + \$5{,}000 = \$72{,}500$.
2. House hack: $\$300{,}000 \times 0.035 + \$7{,}500 = \$10{,}500 + \$7{,}500 = \$18{,}000$.
3. BRRRR: cash in $\$202{,}000$; refinance loan $\$260{,}000 \times 0.75 = \$195{,}000$; cash out $\$195{,}000 - \$5{,}000 = \$190{,}000$; cash left in $\$12{,}000$.
4. Flip: $53,719 tied up for six months, returned with any profit at sale.

Answer: House hack $18,000; flip about $53,700; rental $72,500; BRRRR needs $202,000 at first and leaves $12,000 after a successful refinance. The house hack is the beginner's doorway because it needs the least capital.

Example 2. In this example (the Fix & flip default), ARV is $320,000, total cost is $305,569, cash in is $53,719, the loan is $226,250 at 11%, holding costs are $600 a month and the flip takes 6 months. Find the profit and return on cash, then recompute if the flip runs 3 months long.

Show solution

1. Profit: $\$320{,}000 - \$305{,}569 = \$14{,}431$; return $\$14{,}431 \div \$53{,}719 \approx 26.9\%$ in six months.
2. Extra interest for 3 months: $\$226{,}250 \times 0.11 \div 12 \times 3 \approx \$6{,}222$.
3. Extra holding: $\$600 \times 3 = \$1{,}800$.
4. New profit: $\$14{,}431 - \$6{,}222 - \$1{,}800 = \$6{,}409$.

Answer: A lump-sum profit of about $14,431 shrinks to about $6,409 with a three-month delay — and the profit was only 4.5% of ARV to begin with. Flips pay once and punish delay.

Example 3. In this example, a house rents long-term for $1,900 a month. As a short-term rental it would average $160 a night at 55% occupancy. The short-term version adds owner-paid utilities of $250 a month, and cleaning, supplies and platform fees of 25% of revenue. Compare revenue minus these added costs.

Show solution

1. Long-term revenue: $\$1{,}900 \times 12 = \$22{,}800$.
2. Short-term revenue: $\$160 \times 365 \times 0.55 = \$32{,}120$.
3. Added short-term costs: $\$250 \times 12 + 0.25 \times \$32{,}120 = \$3{,}000 + \$8{,}030 = \$11{,}030$.
4. Short-term after added costs: $\$32{,}120 - \$11{,}030 = \$21{,}090$, versus $\$22{,}800$.

Answer: The short-term rental earns about $9,320 more revenue but about $1,710 less after its added costs — before furnishings, lodging taxes, permits and heavier management. Higher revenue is not higher profit.

PRACTICE

1. Easy What do the letters in BRRRR stand for?

   Show answer

   Buy, rehab, rent, refinance, repeat.

2. Easy Which strategies pay mainly a one-time lump sum, and which pay a monthly stream?

   Show answer

   A fix-and-flip pays a lump sum at sale. Buy-and-hold, house hacking, BRRRR (after refinancing) and short- and mid-term rentals pay a monthly stream.

3. Easy Which Deal Analyzer worksheet would you use for a duplex where you live in one unit?

   Show answer

   The House hack worksheet; for the move-out view, the Rental worksheet with both units rented and management added.

4. **Medium** In this example, a short-term rental averages $140 a night at 62% occupancy. Find annual revenue.

Show answer

$\$140 \times 365 \times 0.62 = \$31{,}682.$

5. **Medium** In this example, a house-hack duplex costs $320,000 with 5% down and $8,000 of closing costs. How much cash is needed?

Show answer

$\$320{,}000 \times 0.05 + \$8{,}000 = \$16{,}000 + \$8{,}000 = \$24{,}000$, plus reserves.

6. **Medium** Why do most experienced investors suggest a house hack or a simple long-term rental as a first deal?

Show answer

They need the least capital and skill, teach every core number and landlord duty, and carry fewer moving parts — no rehab estimate, appraisal bet or changing short-term rules.

7. **Medium** A friend says, "I'll hire a property manager, so my rental will be totally passive." Correct the statement.

Show answer

A manager reduces the daily work but not the owner's responsibility: the owner still chooses and supervises the manager, reads the statements, approves big repairs and pays for capital replacements. No directly owned rental is truly passive.

8. **Hard** In this example, a BRRRR's all-in cost is $180,000, paid in cash. The ARV is $240,000, the lender refinances at 75% of ARV, and refinance closing costs are $4,000. How much cash is left in the deal?

Show answer

Refinance loan $180,000; cash out $\$180{,}000 - \$4{,}000 = \$176{,}000$; cash left in $\$180{,}000 - \$176{,}000 = \$4{,}000.$

9. Hard In the BRRRR in problem 8, the appraisal comes in at $220,000 instead. Now how much cash is left in?

Show answer

Loan $\$220{,}000 \times 0.75 = \$165{,}000$; cash out $\$161{,}000$; cash left in $\$19{,}000$. A low appraisal traps cash in the deal.

10. Hard Give an exit strategy and a backup exit for a flip and for a short-term rental.

Show answer

Flip: sell at ARV; backup — rent it long-term (it must cash-flow in the Rental worksheet) or sell lower. Short-term rental: rent nightly under a permit; backup — mid-term or long-term rental if rules change or bookings fall.

11. Challenge In this example, a short-term rental earns $34,000 a year with added costs of 30% of revenue plus $3,600 of utilities; the same house rents long-term for $2,000 a month. Which earns more after these added costs, and by how much?

Show answer

Short-term: $\$34{,}000 - \$10{,}200 - \$3{,}600 = \$20{,}200$. Long-term: $\$24{,}000$. Long-term earns about $3,800 more before furnishings and taxes are even counted.

12. Challenge Choose a first strategy for each person and defend it in one sentence: (a) a 22-year-old with $20,000 saved and a steady job; (b) a retired contractor with $250,000 cash; (c) a family with $80,000 who want no debt.

Show answer

(a) A house hack: an owner-occupant loan fits the small savings, and living on site teaches landlording. (b) BRRRR or a careful flip could fit his skill and cash, though a paid-for rental fits a retiree's safety. (c) Save toward one modest rental bought with cash, or a small one in a lower-priced market; growth is slower but no lender is involved.

COMMON MISTAKES

- Calling any rental strategy passive. Every directly owned property needs an owner's attention and decisions.
- Treating a flip as income. It is a one-time profit for a job of work, generally taxed as ordinary income, and it stops when you stop.

- Assuming short-term rentals always earn more. Higher revenue comes with higher costs, local permits, lodging taxes and rules that can change.
- Running a deal in only one worksheet. Every strategy needs a backup exit, and the backup must also work on paper.
- Starting with the hardest strategy. BRRRR and flips reward rehab, contractor and appraisal skills a beginner has not yet built.
- Forgetting that a house hack has a lifestyle cost — shared walls, being on call, and neighbors who are also your tenants.

Make it a game · Strategy Match. Make six strategy cards (buy-and-hold, house hack, BRRRR, flip, short-term, mid-term) and twelve person cards ("nurse who travels for work," "retired carpenter with cash," "newlyweds with $15,000 saved," "family that wants no debt"). Deal three person cards to each player. In turn, each player matches a person to a strategy and gives one reason with a number in it. Other players may challenge with a risk; the parent judges. A match that survives the challenge scores two points.

Scripture. "For which of you, intending to build a tower, sitteth not down first, and counteth the cost, whether he have sufficient to finish it? Lest haply, after he hath laid the foundation, and is not able to finish it, all that behold it begin to mock him, Saying, This man began to build, and was not able to finish." (Luke 14:28–30, KJV)

Jesus' builder sits down first and counts the cost before choosing to build. Choosing a strategy is that sitting down: matching the plan to the money, skill and time you actually have, so you are able to finish what you start.

1.4 Goals and Enough: How Many Doors, How Much Income

OBJECTIVES

- State an investing goal as a monthly net cash flow in dollars, with a date and a reason, rather than as a number of properties.
- Compute the number of rentals needed to reach a cash-flow goal at different cash flows per door, leveraged and paid off.
- Compare the cash, debt and risk of a leveraged portfolio and a paid-off portfolio that produce the same income.
- Estimate how long extra payments take to retire a rental mortgage, and build a simple ten-year timeline.
- Explain contentment and the idea of "enough" from Scripture and history, and apply it to a personal goal.

> **Warm-up.** Write down a number: the monthly income, in dollars, that you think a family needs to live simply but comfortably where you live. Then write a second number: how much you think it would take to feel rich. In two or three sentences, explain why the two numbers are different — and which one a person should plan around.

WATCH

How to Become Financially Free with 5 Small & Simple Rentals

Coach Carson · 19:38

https://www.youtube.com/watch?v=b1a-qrJgYaY

> **WHEN TO WATCH**
> Watch after the big idea. Chad Carson builds a goal from a financial-independence number and five paid-off rentals; copy his table of rent, expenses and cash flow per house and compare it with Worked Example 1. Skip his program announcements.

BACKUP VIDEO

When Is It Okay To Buy A Rental Property?

Ramsey Everyday Millionaires · 8:05

https://www.youtube.com/watch?v=DuK0D-ohL9k

Watch before writing your goal for the cash-first view of when to buy a rental. List the steps he says should come before buying, and decide which your own ten-year plan will follow.

KEY TERMS

door

Investor slang for one rentable unit; a fourplex is four doors.

cash flow per door

A portfolio's monthly cash flow divided by its number of units; a measure of how much each unit actually earns after all costs and debt.

cash-flow goal

A target amount of monthly net cash flow from rentals, stated in dollars with a date, used to plan how many and what kind of properties to own.

free and clear

Owned with no mortgage or other loan against it.

leveraged portfolio

A group of rentals financed with mortgages, producing less cash flow per door but controlling more property per dollar invested.

financial independence number

The monthly or annual income from investments that would cover a household's living costs without wages.

50% rule

A rough screen that a rental's operating expenses, including vacancy, average about half its gross rent over time, leaving about half for debt service and cash flow.

rental debt snowball

Paying off rental mortgages one at a time, smallest or highest-rate first, adding each paid-off property's freed cash flow to the next payoff.

contentment

Being satisfied with what is sufficient, so that goals have a limit and wealth serves life rather than ruling it.

CORE IDEAS

The story. In December 1868, a few weeks after his thirty-third birthday, Andrew Carnegie sat in the St. Nicholas Hotel in New York tallying his year's profits, and on a sheet of hotel paper he wrote a memorandum to himself. "Thirty-three and an income of $50,000 per annum!" it began. He resolved to stop there: "Beyond this never earn," to make no effort to increase his fortune, to spend the surplus each year on good causes, and within two years to retire, study and serve. It was a remarkable plan from a young man who had come to America as a poor immigrant boy. He did not keep it. He kept building for more than thirty years, became one of the richest men in history, and only after selling his steel company in 1901 turned his full energy to giving his fortune away. The memo was found among his papers after his death. It is honest evidence of a temptation every investor meets: the goal that keeps moving as soon as you approach it.

How they figured it out. Small investors have long argued about how to set a goal. For years the common boast was a count — "I own fifty doors" — as if the number of units measured success. Experienced teachers pushed back. John Schaub, a Florida investor who taught ordinary people for decades and wrote *Building Wealth One*

House at a Time, urged buying a few good houses in good neighborhoods and paying them off. Chad Carson, in *Retire Early with Real Estate*, taught families to start from their own **financial independence number** — what they actually need to live — and to ask how few rentals could supply it; his "small and mighty" approach often lands on a handful of paid-off houses rather than dozens of mortgaged ones. The BiggerPockets community's long-running "cash flow versus doors" discussions reached the same conclusion: a goal measured in units rewards buying more, while a goal measured in net dollars rewards buying well.

The big idea. Set your goal as **monthly net cash flow in dollars, with a date and a reason** — "$4,000 a month by age 45 so that one parent can be home with our children" — not as a number of doors. Then work backward. If each leveraged rental nets $250 a month, the goal takes $\$4{,}000 \div \$250 = 16$ doors. If each paid-off house nets $800 a month — in this example, rent of $1,600 with expenses near half — the goal takes just 5 houses. Sixteen doors means sixteen roofs, sixteen water heaters, sixteen tenants and sixteen mortgages; five paid-off houses means five of each and no lender. Neither path is free: the paid-off path needs far more cash per house or years of payoff; the leveraged path carries far more debt and risk for the same income. The question is not "How many doors?" but "How much is enough, by when, and with how much risk?"

Cash flow per door is the honest measure of a portfolio, and it is usually thinner than beginners expect. In the Deal Analyzer, a $180,000 house renting for $1,600 a month, bought with 25% down at 7%, with taxes of $2,150 and insurance of $1,150 a year, cash-flows about −$13 a month once vacancy, repairs, CapEx and management are counted; at $1,700 rent, about $60. A portfolio earning $250 a door is doing well in such a market. Thin per-door cash flow is fragile: in this example, one $8,000 roof equals 32 door-months of $250 cash flow, and two vacancies in a month can erase the whole portfolio's income. A paid-off house is sturdier. The same $1,600 rental with no mortgage nets roughly $800–$886 a month depending on the expense estimate, and a bad month means less income, not a missed payment. That is why many careful investors buy with leverage early and then pay the loans down — a **rental debt snowball** — on purpose.

Time is the other ingredient, and arithmetic can show it. In this example, a $135,000 rental loan at 7% has a principal-and-interest payment of about $898; paid as scheduled it lasts 30 years. Add $500 a month and it is gone in about 142 months

(under 12 years); add $1,000 and it is gone in about 92 months (under 8 years). Once one house is free and clear, its whole $898 joins the extra payment on the next loan, and each payoff comes faster. A family that buys five modest houses over ten years and then snowballs the loans can often own them free and clear within twenty — without heroic incomes. The same arithmetic warns the other way: a goal of "financial freedom in three years" almost always requires leverage, speed and risk that ordinary families should think hard about. A **timeline** that is slow enough to survive a recession is better than one that is fast enough to impress.

Contentment is not the opposite of ambition; it is what gives ambition a finish line. Paul wrote that "godliness with contentment is great gain," and Agur prayed for neither poverty nor riches but his daily bread. Carnegie's memo shows how hard it is to stop once the numbers start growing. A good goal therefore has three parts. First, a dollar amount tied to a real need — the family's living costs, a parent at home, giving, a debt-free retirement — rather than to a feeling. Second, a risk limit: the most debt, the fewest months of reserves and the least cash flow per door you will accept. Third, a reason that is bigger than money, written down where you will see it when the next deal tempts you. Write the goal before you buy anything. Investors who write it afterward tend to discover that the goal was always "a little more."

Run the numbers. Use the Rental worksheet to find realistic cash flow per door in your market: enter three typical listings with honest rents and expenses and average their monthly cash flow. Then run the same three at 100% down to see the free-and-clear cash flow (the worksheet's NOI ÷ 12 is close to it). Divide your goal by each to see how many doors each path needs, and multiply by the cash needed per house to see the capital each path requires. Use the projection table to see when each loan balance falls. The classic mistakes: setting a goal in doors; using the best deal you ever saw as your typical cash flow; forgetting that a $250-a-door portfolio has no room for a bad year; planning a timeline that depends on appreciation; and never writing down what "enough" means.

PICTURE STUDY



The Angelus, Jean-François Millet, 1857–1859 · Oil on canvas · Musée d'Orsay, Paris

Image: Wikimedia Commons, public domain

Jean-François Millet grew up on a farm in Normandy and spent his life painting French peasants at work. In *The Angelus* a man and his wife stop digging potatoes when the distant church bell rings at sunset and bow their heads for the evening prayer. They own little — a fork, a barrow, a basket — and they are giving thanks. The painting opens this lesson because it asks the question every goal must answer: what is enough? These two have finished the day's work, have their daily bread, and are content to stop and pray.

Look closely

- Find the church steeple on the far horizon. How does the painter connect the work in the field with the bell from the church?
- Look at the tools and the harvest: a fork, a wheelbarrow, a basket of potatoes. Is this a rich harvest or a sufficient one?
- Notice that both workers have stopped. What does stopping work at the right time have to do with a goal of "enough"?
- Study the light. The sun is setting behind them. What does the end of a day suggest about a lifetime of working and saving?

Talk about it

1. These workers likely rented the field they worked. How might an honest landlord think about the families who farm or live on his land?
2. What would a goal written in “dollars, a date and a reason” look like for a family like this one?
3. Paul wrote, “having food and raiment let us be therewith content.” What does this painting teach about contentment that a rental spreadsheet cannot?

PROJECT

My Ten-Year Goal

You will write a real goal for the next ten years of your life — not a fantasy, but a number with a reason, a risk limit and a timeline — and then test it against your local market with the Deal Analyzer.

Share the finished page with a parent. It will be revisited in Unit 10, when you build a full portfolio plan.

You will need

- Three typical rental listings in your area with rent estimates
- The Deal Analyzer, Rental worksheet
- A spreadsheet (for the payoff timeline)
- Your investor's notebook

Steps

1. Write your goal sentence: a monthly net cash-flow amount, a date, and a reason bigger than money.
2. Write your risk limits: maximum total debt, minimum reserves in months, minimum cash flow per door you will accept, and whether you will borrow at all.
3. Run the three listings in the Rental worksheet with 25% down and again with 100% down. Record average monthly cash flow per door each way.
4. Compute doors needed and capital needed for the leveraged path and the paid-off path.
5. In a spreadsheet, sketch a ten-year timeline: when you could buy each property and, if you borrow, when each loan could be paid off with a stated extra payment (use NPER).
6. Write one paragraph comparing the two paths and choose one — or a blend — explaining why it fits your goal and limits.
7. Print one worksheet, attach your goal page and file both in the deal binder.

INVESTOR'S NOTEBOOK

1. Flashcards: door, cash flow per door, free and clear, rental debt snowball, financial independence number, contentment.
2. Draw two columns of houses: 16 small houses labeled $250 and 5 houses labeled $800, each column totaling $4,000, with the debt written under each.
3. Trap list "Goals": ending with — My goal is in dollars, with a date, a reason and a risk limit, not in doors.

KEY FORMULAS

$$\text{Doors needed} = \frac{\text{monthly cash-flow goal}}{\text{cash flow per door}}$$

$$\text{Cash flow per door} = \frac{\text{portfolio monthly cash flow}}{\text{number of units}}$$

$$\text{Capital needed} = \text{doors} \times \text{cash needed per door}$$

$$\text{Free-and-clear monthly cash flow} \approx \frac{\text{NOI}}{12} \approx 0.50 \times \text{monthly rent (50\% rule)}$$

From history. Carnegie did spend the second half of his life giving. Beginning in the 1880s, his grants paid for more than 2,500 public library buildings across the English-speaking world, more than 1,600 of them in American towns — most of them on the condition that the town supply the land and pay to run the library. He gave the building; the community had to own the duty to keep it. Many of those libraries still stand and still lend books.

WORKED EXAMPLES

Example 1. In this example, a family's goal is $4,000 a month of net rental income. Leveraged rentals net $250 a door; paid-off houses renting for $1,600 net about half the rent. How many of each are needed?

Show solution

1. Leveraged: $\$4{,}000 \div \$250 = 16$ doors.
2. Paid-off cash flow by the 50% rule: $\$1{,}600 \times 0.50 = \$800$ a month.
3. Paid-off: $\$4{,}000 \div \$800 = 5$ houses.

Answer: Sixteen leveraged doors or five free-and-clear houses. The same income can come from very different amounts of property, debt and work.

Example 2. In this example, each house costs $180,000, and buying with 25% down costs $50,400 in cash (down payment plus 3% closing). Compare the capital and debt for 16 leveraged houses and for 5 houses bought with cash (price plus 3% closing).

Show solution

1. Leveraged cash: $16 \times \$50{,}400 = \$806{,}400$; debt $16 \times \$135{,}000 = \$2{,}160{,}000$.
2. Cash purchase per house: $\$180{,}000 + \$5{,}400 = \$185{,}400$.
3. Five houses: $5 \times \$185{,}400 = \$927{,}000$; debt zero.

Answer: The leveraged path needs about $806,400 of cash and $2.16 million of debt for 16 houses; the cash path needs about $927,000 and no debt for 5. Leverage did not make the goal cheap — it made it larger and riskier. The middle path is to buy fewer houses with loans and pay them off.

Example 3. In this example, a $135,000 rental loan at 7% has a P&I payment of $898. How long does it take to pay off with an extra $1,000 a month? Use the payoff formula or a spreadsheet's NPER function.

Show solution

1. Monthly rate $r = 0.07 \div 12 \approx 0.005833$; payment $\$898 + \$1{,}000 = \$1{,}898$.
2. $n = \frac{-\ln(1 - rB/P)}{\ln(1+r)} = \frac{-\ln(1 - 0.005833 \times 135{,}000/1{,}898)}{\ln(1.005833)}$.
3. $rB/P \approx 0.4149$; $-\ln(0.5851) \approx 0.5360$; $\ln(1.005833) \approx 0.005816$.
4. $n \approx 92$ months, about 7 years 8 months.

Answer: About 92 months instead of 360. After payoff, that house's full $898 plus the $1,000 can attack the next loan — the rental debt snowball.

PRACTICE

1. Easy Why is a goal stated in "doors" a poor goal?

   Show answer

   Doors measure size, not income or safety; a large count of thin, heavily mortgaged units can earn less and carry far more risk than a few paid-off houses.

2. **Easy** In this example, a goal is $3,000 a month and each door nets $200. How many doors are needed?

   Show answer

   $3,000 ÷ $200 = 15 doors.

3. **Easy** What does “free and clear” mean?

   Show answer

   The property has no mortgage or other loan against it.

4. **Medium** In this example, a portfolio of 6 units cash-flows $1,380 a month. Find cash flow per door.

   Show answer

   $1,380 ÷ 6 = $230 a door.

5. **Medium** By the 50% rule, about how much does a paid-off house renting for $1,900 net each month?

   Show answer

   About $1,900 × 0.50 = $950, a rough screen; the actual figure depends on taxes, insurance, age and management.

6. **Medium** In this example, a goal is $4,750 a month from paid-off houses netting $950 each, and each costs $210,000 plus 3% closing. How much capital does the paid-off path need?

   Show answer

   $4,750 ÷ $950 = 5 houses; 5 × $216,300 = $1,081,500.

7. **Medium** In this example, a 10-door portfolio nets $250 a door. A furnace replacement costs $7,500. How many door-months of cash flow does it consume?

   Show answer

   $7,500 ÷ $250 = 30 door-months — three months of the whole portfolio’s cash flow.

8. Hard In this example, a $135,000 loan at 7% (P&I $898) gets an extra $500 a month. About how long until payoff? What happens to that money afterward in a debt snowball?

Show answer

About 142 months, just under 12 years (NPER with rate 7%/12, payment $1,398). Afterward the whole $1,398 goes toward the next loan, so the second payoff comes faster.

9. Hard Rewrite this goal so it is useful: “I want to be rich from rentals someday.”

Show answer

For example: “By age 45, own rentals producing $3,500 a month of net cash flow, with no more than 50% loan-to-value and six months of reserves, so my family can give generously and one parent can stay home.” It has a dollar amount, a date, risk limits and a reason.

10. Hard Carnegie’s 1868 goal was clear, dated and generous, yet he did not keep it. What practical safeguard could help an investor keep a goal of “enough”?

Show answer

Write it down with a reason and a risk limit, share it with a spouse or trusted adviser who will ask about it, and decide in advance what happens to income above the goal (giving, paying off debt) so the surplus has a purpose other than buying more.

11. Challenge In this example, Path A owns 12 leveraged doors netting $250 each with $1.6 million of debt; Path B owns 4 paid-off houses netting $750 each. Both earn $3,000 a month. Rents fall 10% (about $160 a door for A and $170 a house for B). Compare the new monthly incomes.

Show answer

A: $12 \times (\$250 - \$160) = \$1{,}080$ — down 64%. B: $4 \times (\$750 - \$170) = \$2{,}320$ — down 23%. The paid-off path is far sturdier in a downturn.

12. **Challenge** Write a ten-year sketch for a 22-year-old with a goal of $2,000 a month by age 35, using a house hack first. Include at least three numbered steps with years and dollar amounts (example figures).

Show answer

A sample: (1) Age 23: house-hack a duplex with about $20,000; tenant rent cuts housing cost. (2) Age 26: move out, keep the duplex as a rental (about $300 a month), and house-hack a second small property. (3) Ages 28–35: save $1,000 a month plus all rental cash flow and snowball the smaller loan; by 35, one property free and clear (about $1,200) plus the other's cash flow approach $2,000. Answers vary; full credit requires dates, dollars and a risk limit.

COMMON MISTAKES

- Setting the goal in doors instead of net dollars. Doors measure effort and debt, not income.
- Using your best deal as your typical cash flow. Plan with average, honestly analyzed deals.
- Forgetting the risk of thin cash flow per door. A few vacancies or one big repair can erase a month's income across a whole portfolio.
- Building a timeline that depends on appreciation or on refinancing at good rates.
- Assuming paid-off rentals are free of costs. Taxes, insurance, repairs and CapEx continue forever; the 50% rule is a reminder.
- Never writing down "enough." A goal without a limit keeps moving.

> **Make it a game · Enough Auction.** Give each player a goal card ("$3,000 a month by 40 for a parent at home"). Lay out house cards showing price, rent and loan options. Players take turns buying with play money, choosing leveraged or cash. Each round, roll for an event: rent drop, roof, vacancy, rate rise, or quiet year. A player who reaches the goal must announce "Enough!" and may stop buying; anyone who keeps buying past the goal must take an extra event card each round. The winner is the first to hold the goal for three straight rounds.

> **Scripture.** “But godliness with contentment is great gain. For we brought nothing into this world, and it is certain we can carry nothing out. And having food and raiment let us be therewith content.” (1 Timothy 6:6–8, KJV)
>
> Paul does not forbid planning or owning; he puts a ceiling on wanting. A rental goal written in dollars, with a reason and a limit, lets wealth serve a family instead of ruling it — and leaves room for the godliness that is the real gain.

1.5 The Investor's Team

OBJECTIVES

- Name the members of a small investor's team — agent, lender, inspector, contractor, property manager, insurance agent, tax professional, attorney and title or escrow officer — and state what each does.
- Explain the difference between a lender's prequalification and pre-approval and what a Loan Estimate shows.
- Vet a professional by license lookup, references, insurance and written terms, and compare three bids on the same scope of work.
- Compare the true annual cost of two property-management fee structures for the same rental.
- Explain why the investor remains the decision-maker who must understand every number, however good the team.

> **Warm-up.** Think of the last time your family had something important done — a car repaired, a roof fixed, a tooth filled. In five minutes, write how your parents chose who to trust, what they asked before saying yes, and one thing they would do differently next time. Then list every kind of professional you think a person needs to buy and rent out a house.

WATCH

How Should a Real Estate Investor Go About Building Their Team? [#AskBP 025]

BiggerPockets · 9:15

https://www.youtube.com/watch?v=y5czgaUz5II

> **WHEN TO WATCH**
> Watch after the fourth core idea. List every team member Brandon Turner names in the order he says to find them, and add one vetting question of your own beside each.

BACKUP VIDEO

The 4 People Every Real Estate Investor Needs on Speed Dial

Roots Podcast · 10:23

https://www.youtube.com/watch?v=LUP_rTZ0sjw

A second pass before the project: note his advice on finding an agent, lender, contractor and property manager, and add any new interview questions to your checklist.

KEY TERMS

investor-friendly agent

A licensed real estate agent who understands rental math, pulls sale and rent comparables, and writes offers quickly on investment property.

pre-approval

A lender's conditional commitment to lend up to a stated amount after reviewing the borrower's credit, income, assets and debts; stronger than a prequalification, which is an estimate from unverified information.

Loan Estimate

A standard three-page federal form a lender must provide within three business days of a mortgage application, showing the loan's rate, payment and closing costs.

home inspector

A professional who examines a property's structure and systems before purchase and reports defects; licensing rules vary by state.

licensed, bonded and insured

A contractor who holds the state license required for the work, carries a surety bond and has liability (and, with employees, workers' compensation) insurance.

property manager

A person or firm paid, commonly a percent of collected rent plus leasing fees, to market units, screen tenants, collect rent and arrange repairs; many states require a real estate license.

landlord (dwelling) insurance

A property insurance policy written for a home rented to others, covering the building, the owner's liability and often loss of rents; different from a homeowner's policy.

title and escrow

The services that search the public records for liens and defects, insure the title, hold funds and documents, and close the sale.

scope of work

A written, item-by-item description of the work a contractor will do, used to compare bids on the same basis.

conflict of interest

A situation in which an adviser gains from the advice they give, such as a seller who is also the lender or an agent paid only if you buy.

CORE IDEAS

The story. In 1865 a young London teacher named Octavia Hill persuaded the art critic John Ruskin to put part of an inheritance into an experiment. With his money she took over three run-down houses in Paradise Place, Marylebone, crowded with poor families. Ruskin asked only a steady 5% return on his capital; Hill promised it, and promised that any profit above 5% would go back into the houses for the tenants' benefit. She repaired roofs, drains and stairs promptly, cleaned the common areas, collected rent herself every week, and knew each family by name — firm about rent, generous about repairs. The houses paid their 5%. The next year Ruskin bought five more houses in nearby Freshwater Place for her to manage, and soon other owners asked her to take on their buildings. She could not visit them all, so she trained a corps of volunteers she called her "fellow workers" to collect rents, notice needed repairs and know the tenants. One woman's good idea became a working team: a money partner, a manager, rent collectors and builders, each doing a part.

How they figured it out. Hill's method worked because each role was clear and each person was accountable. Ruskin supplied capital and stayed out of daily decisions;

Hill set the standards and kept the books; her fellow workers did the weekly visits and reported back; tradesmen were hired for the work they knew. She insisted that managers be trained, not just hired, and that every repair and every penny be recorded. Small investors today use the same structure on a smaller scale. Modern law added safeguards Hill never had: state licenses for real estate agents, contractors and in many places home inspectors and property managers; federal forms such as the **Loan Estimate** that make a lender show its costs in a standard way; title insurance and escrow so that money and deeds change hands safely. A beginner does not have to know everything — but must know who to ask, how to check them, and how to read what they hand back.

The big idea. A small investor's **team** is the set of professionals who supply what the investor cannot do alone. The core members are an **investor-friendly agent** who finds properties and runs sale and rent comparables; a **lender** who pre-approves you and quotes loans; a **home inspector**; one or more **contractors** and a reliable handyman; a **property manager** (or you, if you self-manage); an **insurance agent** who writes landlord policies; a **tax professional** (a CPA or enrolled agent) who understands rentals; a real estate **attorney** for contracts, leases and problems; and a **title or escrow** officer who closes the deal. The team supplies expertise and saves costly mistakes. But the team does not make decisions, and many of its members are paid only if a deal happens. The investor is the one who signs, borrows and owns the risk — so the investor must understand every number the team produces.

Each member has a job and a trap. The **agent** finds and negotiates deals and should hand you comps, not opinions; remember that a commission depends on a purchase, and many buyers now sign a written agreement stating how the agent is paid — read it. The **lender** issues a **pre-approval** (verified credit, income and assets), which is stronger than a **prequalification** (an estimate), and must give a **Loan Estimate** within three business days of an application; compare Loan Estimates from at least two or three lenders. The **inspector** works for you, not the seller; attend the inspection and add a sewer-line scope or roof inspection when the house's age suggests it. **Contractors** must be licensed, bonded and insured where the state requires it — check the state's license lookup — and should bid on the same written **scope of work.** A **property manager** commonly charges a percent of collected rent plus leasing and renewal fees (Unit 8). The **insurance agent** must write a landlord

(dwelling) policy, not a homeowner's policy. The **tax professional** and **attorney** are worth paying before a mistake, not after.

Vetting is simple, repeated work. **Check the license** on the state's own lookup page for agents, contractors and, where licensed, inspectors and managers; note its status and any discipline. **Ask for references** — three recent clients with similar work — and call them. **Get it in writing**: a bid with line items, a management agreement with every fee, a lender's Loan Estimate. **Get three bids** for any significant job, on the same scope, and be suspicious of the bid far below the others; it usually leaves something out or asks for too much money up front. **Watch for conflicts of interest**: a "turnkey" seller who also manages and also refers the lender, a contractor who wants cash only, an adviser who earns more if you buy more. And remember Hill's second rule: treat the people on your team honestly — pay on time, pay what you agreed, and never ask anyone to cut a corner the law requires.

Paying for expertise is part of the deal math, not an extra. In this example, a $500 inspection that finds a cracked sewer line needing $9,000 of work either saves you from a bad purchase or lets you negotiate the price down — a return many times its cost. A tax professional who correctly separates land from building and repairs from improvements may save more than the fee every year. A good manager costs, in this example, 9% of collected rent, but a bad tenant chosen to save that fee can cost several months of rent and a court process. The question is never "How do I avoid paying professionals?" but "Which expertise do I lack, and what will its absence cost me?" Many beginners self-manage a house hack to learn, use a manager for properties far from home, and always pay for inspection, title insurance and tax help. Whatever you hire out, you must still be able to check the work.

Run the numbers. The team's costs show up in specific Deal Analyzer inputs. The agent's comps produce your rent and, for BRRRR and flips, your ARV. The lender's Loan Estimate supplies the rate, closing costs and mortgage insurance. The inspector's report becomes your upfront repairs and your CapEx assumptions. The contractor's bid becomes the rehab budget. The insurance agent's quote becomes the insurance line. The manager's fee is the management percent — leave it in even if you self-manage, because your time has value and you may not manage forever. A careful investor writes the source of every input on the printed worksheet ("rent: three comps from agent, March"; "insurance: quote"). The classic mistakes: using the seller's or a salesperson's numbers instead of your team's; skipping the inspection to

“win” the deal; hiring the cheapest unlicensed contractor; and letting an adviser’s enthusiasm replace your own analysis.

PICTURE STUDY



Octavia Hill, John Singer Sargent, 1898 · Oil on canvas · National Portrait Gallery, London

Image: Wikimedia Commons, public domain

John Singer Sargent, an American who worked in London, was the most sought-after portrait painter of his day, known for capturing character with quick, sure brushwork. He painted Octavia Hill in 1898, when she was sixty and her housing work had spread across London. Sargent shows her plainly dressed, hands folded, steady and alert — a manager rather than a society lady. The portrait opens this lesson because Hill's greatest skill was building a team: a money partner, trained fellow workers and honest tradesmen, all held to one standard.

Look closely

- Look at her hands, folded and still. What do they suggest about her temperament as a manager?
- Notice her plain dark dress and simple white collar. How does this portrait differ from paintings of wealthy women of her time?
- Study her eyes. Sargent was famous for showing character in the face. What qualities do you see?
- Notice the dark, simple background. Why might a painter choose to put all the attention on the sitter's face and hands?

Talk about it

1. Hill promised her investor 5% and gave any surplus back to the houses. What does that tell you about how she balanced the owner's interest and the tenants'?
2. Which of her team roles — money partner, manager, rent collector, tradesman — would you fill yourself as a beginner, and which would you hire?
3. Proverbs says plans are established "in the multitude of counsellors." How did Hill's fellow workers make her work wiser as well as larger?

PROJECT

Build a Paper Team

You will research — but not hire or contact — the professionals a beginning investor in your area would need, using public license lookups and published information. Any phone call or meeting happens only with a parent present and permission.

The result is a one-page team sheet you will keep in the front of your deal binder and update all year.

You will need

- Your state's official license lookups for real estate licensees and contractors (and inspectors or property managers if licensed in your state)
- The CFPB's sample Loan Estimate (search "Loan Estimate explainer" at consumerfinance.gov)
- A sample property-management agreement or a manager's published fee schedule
- The Deal Analyzer and your deal binder

Steps

1. List the nine team roles and write one sentence for each describing the job and the Deal Analyzer input it supplies.
2. Using your state's license lookup, find how to verify an agent's and a contractor's license; record what the lookup shows (status, expiration, discipline). Do not list private home addresses.
3. Find out whether your state licenses home inspectors and whether property managers must hold a real estate license; record the official source.
4. Read the CFPB Loan Estimate explainer and label, on a printed sample, the rate, monthly payment, cash to close and the page showing closing costs.
5. Compare two published property-management fee schedules for a $1,800-a-month rental using the method in Worked Example 1.

6. Write a ten-question interview checklist you would use for a contractor and for a property manager.
7. Write a one-paragraph reflection: which roles you would fill yourself as a beginner, which you would always hire, and why. File the team sheet in the deal binder.

INVESTOR'S NOTEBOOK

1. Flashcards: each team role — front the title, back the job, the Deal Analyzer input it supplies and one warning sign.
2. Draw a wheel with the investor at the hub and nine spokes for the team, writing on each spoke what flows to the investor (comps, Loan Estimate, report, bid).
3. Trap list "Team": ending with — Advisers advise; the investor decides, signs and owns the risk.

KEY FORMULAS

$$\text{Annual management cost} = \text{EGI} \times \text{management } \% + \text{leasing fees} + \text{renewal fees}$$

$$\text{Annual leasing cost} = \frac{\text{leasing fee per new tenant}}{\text{average years per tenant}}$$

$$\text{Value of expertise} = \text{cost of the mistake avoided} - \text{fee paid}$$

From history. The Loan Estimate your lender hands you is young. Until October 3, 2015, borrowers received a "Good Faith Estimate" and a separate federal Truth in Lending disclosure that used different terms for the same costs, and a long HUD-1 settlement statement at closing. The Consumer Financial Protection Bureau's "Know Before You Owe" rule combined them into two forms — the three-page Loan Estimate and the five-page Closing Disclosure — designed so that a borrower can lay quotes from different lenders side by side and compare them line by line.

Example 1. In this example, a rental's effective gross income is $22,560 a year (rent $2,000 a month, 6% vacancy), and tenants stay two years on average. Manager 1 charges 8% of collected rent plus a leasing fee of one full month's rent per new tenant. Manager 2 charges 10% plus a leasing fee of half a month's rent. Compare the annual cost.

Show solution

1. Manager 1 percent: $\$22{,}560 \times 0.08 = \$1{,}804.80$; leasing $\$2{,}000 \div 2 = \$1{,}000$ a year; total $\$2{,}804.80$.
2. Manager 2 percent: $\$22{,}560 \times 0.10 = \$2{,}256$; leasing $\$1{,}000 \div 2 = \$500$ a year; total $\$2{,}756$.
3. Difference: $\$2{,}804.80 - \$2{,}756 = \$48.80$.

Answer: Nearly identical — the "cheaper" 8% manager costs slightly more once leasing fees are counted. Compare whole agreements (renewal fees, maintenance markups, minimum fees), not headline percents. In the Rental worksheet, the 9% default is a fair middle estimate.

Example 2. In this example, you receive three bids to replace a roof on a rental. Bid A: $11,800, licensed and insured, line-item scope including tear-off, underlayment and flashing, three references, 30% deposit. Bid B: $7,900, no license found on the state lookup, "cash preferred," one-line scope, 60% up front. Bid C: $12,900, licensed, bonded and insured, same scope as A plus replacing damaged decking at a stated price per sheet, lien waivers at payment. Apply a vetting checklist.

Show solution

1. License check: A and C pass; B fails — reject regardless of price.
2. Same scope? A and C list the same items; C adds decking at a unit price, which A would charge as a change order.
3. Payment terms: A asks 30% up front and C provides lien waivers; B's 60% up front is a warning sign.
4. Compare A and C on equal scope: if about 8 sheets of decking at $95 each are needed ($760), A's likely total is about $12,560 versus C's $12,900.

Answer: Choose A or C after calling references; the $340 difference may be worth C's lien waivers and fixed decking price. Bid B is not cheaper — it is riskier and probably incomplete.

Example 3. In this example, you are about to buy a 1950s rental for $240,000. The inspection costs $450 and an added sewer-line camera scope $200. The scope finds a collapsed clay line; replacement is bid at $9,000. The seller agrees to a $7,500 price reduction. What did the inspection team earn you?

Show solution

1. Fees: $\$450 + \$200 = \$650$.
2. Price reduction: $7,500; you still pay $\$9{,}000 - \$7{,}500 = \$1{,}500$ of the repair, but you knew about it before buying.
3. Net benefit versus buying blind: $\$7{,}500 - \$650 = \$6{,}850$, plus the value of knowing.

Answer: About $6,850 — more than ten times the fees. Enter the $9,000 as upfront repairs and the new price in the Rental worksheet to see the real deal.

PRACTICE

1. Easy Name four members of an investor's team and one thing each provides.

Show answer

For example: agent — comparables and offers; lender — pre-approval and Loan Estimate; inspector — condition report; insurance agent — landlord policy quote. Others: contractor, property manager, tax professional, attorney, title/escrow.

2. Easy What is the difference between a prequalification and a pre-approval?

Show answer

A prequalification is an estimate from information the borrower states; a pre-approval follows the lender's review of verified credit, income and assets and is a stronger conditional commitment.

3. Easy Within how many business days of a mortgage application must a lender provide a Loan Estimate?

Show answer

Three business days.

4. Medium In this example, EGI is $\$19{,}740$. A manager charges 9% of collected rent and a $\$250$ annual renewal fee. Find the annual management cost.

Show answer

$\$19{,}740 \times 0.09 + \$250 = \$1{,}776.60 + \$250 = \$2{,}026.60.$

5. Medium Why should an inspector be chosen and paid by the buyer rather than recommended by the seller?

Show answer

The inspector must work for the buyer's interest alone; an inspector who depends on referrals from the seller's side may feel pressure to soften findings — a conflict of interest.

6. Medium List three things to verify before hiring a contractor.

Show answer

A current state license for the work (on the state's lookup), liability insurance (and workers' compensation if they have employees) and recent references; also a written line-item bid and a reasonable payment schedule.

7. Medium Why does the Deal Analyzer's management input stay in even for a self-managing owner?

Show answer

Your time has value, you may later hire a manager or sell to someone who must, and a deal that works only with free labor is weaker than it looks.

8. Hard In this example, three bids for interior paint are $4,200, $4,600 and $2,300. The low bid's scope says "paint interior." What should you do before deciding?

Show answer

Ask all three to bid the same written scope (rooms, ceilings, trim, prep, number of coats, who buys paint); verify licenses and insurance. A bid at half the others usually omits work or materials, or signals an unlicensed contractor.

9. Hard In this example, Manager A charges 7% plus 100% of a month's rent per lease-up and a 15% markup on maintenance; Manager B charges 10% with no markup and a 50% lease-up fee. The rental's EGI is $21,150, rent $1,875, tenants stay 2 years, and repairs average $1,500 a year. Compare annual costs.

Show answer

A: $\$1{,}480.50 + \$937.50 + \$225 = \$2{,}643$. B: $\$2{,}115 + \$468.75 = \$2{,}583.75$. B is about $59 a year cheaper despite the higher percent.

10. Hard A "turnkey" company offers to sell you a renovated rental, manage it, and refer you to its own lender. Name the conflicts of interest and how you would protect yourself.

Show answer

The seller profits from the price, the manager from the fees and the referral partner from the loan, so none is independent. Use your own agent's comps, your own inspector, compare outside lenders' Loan Estimates and get independent management quotes; run the numbers yourself.

11. **Challenge** In this example, skipping a $500 inspection "to make the offer stronger" saves the fee. If there is a 20% chance of an undiscovered $10,000 defect, what is the expected cost of skipping it?

    Show answer

    Expected cost $0.20 \times \$10{,}000 = \$2{,}000$, versus a $500 fee: skipping costs about $1,500 on average, and far more in the bad case.

12. **Challenge** Octavia Hill was firm about rent and generous about repairs. Explain how both halves serve the tenant and the owner, and how a modern manager could follow her example.

    Show answer

    Firm, consistent rent collection keeps the property solvent and treats every tenant alike; prompt repairs keep homes safe and tenants staying longer, which lowers vacancy and turnover costs. A modern manager does both: clear written policies applied equally, fast repair response, regular inspections and respectful personal contact.

COMMON MISTAKES

- Letting the team decide. Agents, lenders and sellers are often paid only if you buy; the investor must check every number.
- Treating a prequalification as a pre-approval. Only a pre-approval reflects a lender's review of verified documents.
- Hiring the lowest bid without a common scope or a license check. The cheapest bid usually leaves something out.
- Skipping the inspection to win a deal. A few hundred dollars protects against defects that cost thousands.
- Insuring a rental with a homeowner's policy. A rental needs a landlord (dwelling) policy.
- Comparing managers by their headline percent alone. Leasing, renewal and maintenance-markup fees can reverse the ranking.

Make it a game · Who Do You Call?. Write twenty problem cards: “The roof is leaking,” “Is this house worth the price?”, “The tenant asks to add a dog,” “Which loan costs less?”, “How do I depreciate this?”, “Is there a lien on the title?” Put nine team-member cards face up. A reader flips a problem card; the first player to slap the right team member and name one question to ask them wins the card. A wrong slap or a vague question passes the card on. Most cards after ten minutes wins.

Scripture. “Without counsel purposes are disappointed: but in the multitude of counsellors they are established.” (Proverbs 15:22, KJV)

Solomon praises many counsellors, not one salesman. A good team gives an investor many independent eyes on a deal; the wise investor listens to all of them, weighs their interests, and still makes the decision and carries the responsibility.

UNIT 1

The Investor's Foundations

In 1866 a woman who had been born enslaved paid $250 of saved wages for two lots on the edge of a dusty California pueblo, and held them while Los Angeles grew up around her. Two generations earlier, one of the Revolution's heroes had sat in debtors' prison because his land could not pay his loans, while a patient New York fur trader bought Manhattan farmland he would hold for the rest of his life. This unit begins with them. You will learn the **four ways a rental pays — cash flow**, **principal paydown**, **appreciation** and **depreciation** — and why only the first is money you can spend. You will learn what **leverage** really does: a loan multiplies losses exactly as it multiplies gains, and the test of a good loan is whether the property earns more than the loan costs.

Then you will survey the **strategies** small investors use — buy-and-hold, house hacking, BRRRR, flipping, short- and mid-term rentals — and meet the four worksheets of the School Launch **Deal Analyzer**. You will write a goal measured in dollars of monthly income with a date and a reason, not in "doors," and you will think hard about what "enough" means. Finally you will assemble a paper team of the professionals an investor needs and learn to check their licenses, compare their bids and read their fees. Bring a calculator and an open mind; leave behind any promise of easy money.

PREREQUISITES

- Can compute percents, percent change and a simple average, and use a calculator's exponent key
- Can read a simple table and enter numbers into an online form or spreadsheet
- Has a bound investor's notebook and a binder or folder ready to become the deal binder
- Has read the course's how-to-use pages and the Deal Analyzer's opening page with a parent

MASTERY CHECKLIST

- ☐ I can name the four ways a rental pays, compute each for one year, and say which are spendable cash and which are paper wealth.
- ☐ I can compute annual depreciation for a residential rental using 27.5 years and a building basis that excludes land.
- ☐ I can compute the percent change in equity for a given change in value at any down payment and explain why leverage multiplies losses.
- ☐ I can compare a cap rate with a loan constant to tell positive from negative leverage, and compute a reserve target in months of PITI.
- ☐ I can describe buy-and-hold, house hacking, BRRRR, flipping and short- and mid-term rentals by how they pay, the capital and skill they need and their main risks.
- ☐ I can open the right Deal Analyzer worksheet for a strategy and explain what its default example shows.
- ☐ I can write a goal in dollars of monthly cash flow with a date, a reason and a risk limit, and compute the doors and capital it requires.
- ☐ I can name the members of an investor's team, verify a license, compare three bids on one scope,

and compare two management fee structures.

OPTIONAL BOOKS AND RESOURCES FOR THIS UNIT

- **School Launch Deal Analyzer**: Free. The four-worksheet calculator used in every lesson — Rental property, House hack, BRRRR and Fix & flip — with a 30-year projection, a stress test and printable worksheets. Use it from Lesson 1.1 onward. Ages 13 and up.
- **The Book on Rental Property Investing, by Brandon Turner (BiggerPockets Publishing)**: A printed book from the publisher's own store. A thorough, numbers-first guide to buying and holding rentals, by a longtime BiggerPockets host. Read the chapters on the four returns and on strategies alongside Lessons 1.1 and 1.3; a parent may want to preview the chapters on borrowing. Ages 15 and up.
- **Retire Early with Real Estate, by Chad Carson (BiggerPockets Publishing)**: A printed book from the publisher's own store. Carson shows how to set a goal from a family's real needs and reach it with a small number of rentals, including paying them off. Use it with Lesson 1.4. Ages 15 and up.
- **IRS Publication 527: Residential Rental Property**: Free and official. The IRS's own explanation of rental income, expenses and depreciation for residential rentals. Skim the depreciation section with Lesson 1.1; it returns in Unit 9. Education only, not tax advice. Ages 15 and up.
- **CFPB: Owning a Home**: Free and official. The Consumer Financial Protection Bureau's guide to mortgages, including how to compare Loan Estimates and what a pre-approval means. Use it with Lessons 1.2 and 1.5. Ages 14 and up.

Not required. Every project in this unit works without them. School Launch has no ties to these authors, publishers or companies.

LESSONS IN THIS UNIT

1.1	**Why Rental Property: The Four Ways Real Estate Pays**	3 sessions of 50 minutes
1.2	**Leverage, Risk and the Borrower's Burden**	3 sessions of 50 minutes
1.3	**The Strategy Map: Buy-and-Hold, House Hack, BRRRR, Flip and Short-Term Rental**	3 sessions of 50 minutes

1.4	**Goals and Enough: How Many Doors, How Much Income**	3 sessions of 50 minutes
1.5	**The Investor's Team**	3 sessions of 50 minutes

Unit 1 test

Closed notes, basic calculator only. Twenty four-choice questions, 5 points each, 100 points total. Allow about two minutes per question — set a timer for 40 minutes. Show the arithmetic for every calculation question on scratch paper. Choose the one BEST answer; aim for 80% (16 of 20) or better, and rework every miss. Figures marked "in this example" are examples — real prices, rents, rates and costs vary by place and year.

1. **5 pts**

   In this example, an investor buys a $400,000 rental with 20% down. If the value rises 5%, by what percent does her equity rise (ignore costs and paydown)?

   A. 5%

   B. 25%

   C. 20%

   D. 50%

2. **5 pts**

   Which of the four returns of a rental property can the owner spend this month without selling or borrowing?

   A. Appreciation

   B. Principal paydown

   C. Depreciation

   D. Cash flow

3. 5 pts

In this example, a rental costs $275,000, and the assessor values the land at $55,000. What is the annual depreciation?

A. $8,000

B. $10,000

C. $7,051

D. $5,641

4. 5 pts

A rental's cap rate is 6.0% and the proposed loan's constant is 7.6%. Compared with paying cash, the loan will:

A. Raise the cash-on-cash return because leverage always helps

B. Have no effect on the return

C. Lower the cash-on-cash return — negative leverage

D. Raise the cap rate

5. 5 pts

In this example, a family's goal is $3,600 a month of net rental cash flow, and each leveraged rental nets $300. How many doors are needed?

A. 10

B. 12

C. 18

D. 36

6. 5 pts

What is the main difference between a lender's pre-approval and a prequalification?

A. A pre-approval follows the lender's review of verified credit, income and assets; a prequalification is an estimate from stated information

B. A prequalification is a binding loan commitment

C. They are the same thing

D. A pre-approval is issued only after closing

7. 5 pts

Within how many business days of a mortgage application must a lender give the borrower a Loan Estimate?

A. One

B. Ten

C. Thirty

D. Three

8. 5 pts

A 23-year-old with $20,000 saved, a steady job and no landlord experience asks which strategy most experienced investors suggest first. The best answer is:

A. A fix-and-flip financed with hard money

B. A portfolio of short-term rentals in a resort town

C. A house hack with an owner-occupant loan, or one simple long-term rental

D. A BRRRR with a large rehab

9. 5 pts

Which statement about a fix-and-flip is correct?

A. It pays a one-time profit at sale and is generally taxed as ordinary income

B. It produces monthly passive income

C. It earns depreciation every year

D. It needs no exit plan if the ARV is right

10. 5 pts

In this example, a short-term rental averages $150 a night with 60% of nights booked. What is its annual revenue?

A. $54,750

B. $32,850

C. $27,000

D. $21,900

11. 5 pts

In this example, a BRRRR's all-in cost is $170,000, paid in cash. It appraises for $220,000, the lender refinances at 75% of value, and refinance closing costs are $4,000. How much cash is left in the deal?

A. $0

B. $5,000

C. $4,000

D. $9,000

12. 5 pts

In this example, a buyer puts 3.5% down on a $300,000 rental, and a year later values have fallen 5%. Ignoring paydown, the buyer:

A. Has gained equity because of principal paydown

B. Has exactly zero equity

C. Owes more than the house is worth — underwater by about $4,500

D. Can sell for a profit after costs

13. 5 pts

In this example, a rental's PITI is $1,800 and its other monthly operating costs average $200. What is a six-month reserve?

A. $10,800

B. $12,000

C. $24,000

D. $1,200

14. 5 pts

Which part of a rental property is never depreciated?

A. The land

B. The roof

C. The furnace

D. The building's walls

15. 5 pts

An investor buys with an adjustable-rate loan that resets in five years, planning to refinance before then. Which risk is she most exposed to?

A. Concentration risk

B. Appraisal risk only

C. Interest-rate risk

D. No risk, because she plans to refinance

16. 5 pts

Three bids for the same roof arrive: $11,500 and $12,400 from licensed, insured roofers, and $6,900 from a contractor not found on the state license lookup who wants 60% up front in cash. The wisest choice is to:

A. Take the low bid and save money

B. Split the job among all three

C. Pay the low bidder only after the work is done

D. Reject the low bid and choose between the licensed bids after checking references and scope

17. 5 pts

Two property managers quote 8% and 10% of collected rent. Before choosing the 8% manager, an investor should:

A. Compare the whole agreements — leasing, renewal and maintenance-markup fees — on the same rental

B. Choose the lower percent; it is always cheaper

C. Ask the seller which manager to use

D. Remove management from the Deal Analyzer

18. 5 pts

Which is the most useful investing goal?

A. “Own 50 doors as fast as possible.”

B. “Get rich from real estate someday.”

C. “By age 45, $4,000 a month of net rental cash flow with no more than 50% loan-to-value, so a parent can be home.”

D. “Buy whatever my agent recommends.”

19. 5 pts

Over many years, rents rise with inflation while a 30-year fixed principal-and-interest payment stays the same. As a result:

A. The rental's property taxes and insurance stay the same too

B. The loan balance grows

C. Cash flow is guaranteed to rise every year

D. The gap between rent and the loan payment tends to widen, though taxes, insurance and repairs also rise

20. 5 pts

In this example, an owner must sell a $250,000 rental quickly, and selling costs are 8% of the price. How much of the equity is consumed by selling costs?

A. $8,000

B. $20,000

C. $25,000

D. $2,000

ANSWER KEY

1. B. Equity is $80,000; the gain is $400,000 × 0.05 = $20,000; $20,000 ÷ $80,000 = 25%. A (5%) is the change in the property's value, not in her equity.
2. D. Only cash flow is spendable now. Appreciation and principal paydown build equity reached by selling or refinancing; depreciation is a tax deduction.
3. A. Building basis $275,000 − $55,000 = $220,000; $220,000 ÷ 27.5 = $8,000. B depreciates the land too; C and D use 39 years, the nonresidential life.
4. C. When the loan constant exceeds the cap rate, each borrowed dollar costs more than it earns, so borrowing lowers the return on cash. Financing never changes the cap rate (D), which ignores debt.
5. B. $3,600 ÷ $300 = 12 doors. The lesson's point is that the same goal might be met by far fewer paid-off houses.
6. A. Pre-approval rests on verified documents and is the stronger conditional commitment. A prequalification commits the lender to nothing (B is wrong).
7. D. Three business days. Comparing Loan Estimates from several lenders is the simplest way to compare rates and closing costs.
8. C. A house hack needs the least capital and teaches landlording while living on site; a simple rental teaches every core number. Flips and BRRRR reward skills a beginner lacks, and short-term rentals depend on changing local rules.
9. A. A flip is a job of work that pays once; profits are generally ordinary income. It is not passive (B), the owner does not hold it long enough to depreciate it as a rental (C), and it always needs a backup exit, usually renting (D).
10. B. $150 × 365 × 0.60 = $32,850. A assumes every night is booked; revenue is not profit, since cleaning, fees, utilities and taxes must still be subtracted.
11. D. Loan $220,000 × 0.75 = $165,000; cash out $165,000 − $4,000 = $161,000; left in $170,000 − $161,000 = $9,000. B forgets the closing costs.
12. C. Loan $289,500; value $285,000; she is $4,500 underwater before selling costs, which make the hole deeper.
13. B. 6 × ($1,800 + $200) = $12,000. A leaves out the operating costs.
14. A. Land does not wear out and is never depreciated; the building and its components are, over 27.5 years for residential rentals.
15. C. If rates are higher at the reset or a refinance is not available, her payment can rise sharply. A plan that depends on refinancing at good rates is a bet, not a certainty.

16. D. An unlicensed contractor demanding large cash deposits is a warning sign whatever the price. Compare the licensed bids on the same written scope and call their references.
17. A. Leasing and markup fees can make the lower percent the more expensive manager. Never remove management from the analysis (D).
18. C. It states dollars, a date, a risk limit and a reason. A measures doors, which rewards buying more rather than buying well.
19. D. Fixed-rate debt lets rising rents widen the margin over the payment, but expenses rise too and rents can stall, so cash flow is not guaranteed (C).
20. B. $\$250{,}000 \times 0.08 = \$20{,}000$. Illiquidity is a real cost; a quick sale can consume several years of appreciation.

PORTFOLIO PIECE: THE DEAL BINDER — FOUNDATIONS

Open your deal binder with the five pieces of this unit: the Four Returns Sheet for a real listing with its first year split into cash flow, principal paydown, appreciation and depreciation at 3% and 0% appreciation (1.1); the Leverage Ladder table running one house at four down payments with loan constants, equity swings and reserve targets, and your family discussion paragraph (1.2); the One House, Four Worksheets first look with its strategy comparison table (1.3); your Ten-Year Goal page with its dollars, date, reason, risk limits and payoff timeline (1.4); and your Paper Team sheet with license-lookup notes, a labeled Loan Estimate and a management-fee comparison (1.5).

Every analysis page ends with a printed Deal Analyzer worksheet and a one-paragraph verdict — buy, negotiate to a stated price, or walk away. Date every page and write the source of every input (listing, comps, assessor, quote) beside it.

LOOK FOR	WHAT IT MEANS
Four returns	All four returns are computed correctly for a real listing, land is excluded from depreciation, both appreciation cases are shown, and the verdict names which return the deal depends on.
Leverage ladder	Four down payments are run with correct cash flow, cash-on-cash, DSCR, loan constants and equity swings; positive and negative leverage are labeled correctly and reserves are computed.
Strategy map	The same listing is entered in all four worksheets, the comparison table is complete and accurate, and the verdict fits a beginner's capital and skill.
Goal page	The goal is in net dollars with a date, a reason and risk limits; doors and capital are computed for both a leveraged and a paid-off path; the timeline uses honest assumptions.
Paper team	Every role is described with the input it supplies, license lookups are recorded from official sources without private information, and the fee comparison is computed correctly.
Records and judgment	Pages are dated, every input has a source, worksheets are printed, and verdicts are defended with numbers — walking away with a clear reason earns full credit.

UNIT 2

Markets, Neighborhoods and Comparables

In July 1915 the government began auctioning town lots above a tent city at Ship Creek, Alaska, where a new railroad had brought jobs, and Anchorage was born. That order of events — jobs, then people, then housing demand, then land value — is where this unit begins. You will learn to choose a **market** from free public data on population, jobs, incomes and new construction; to compute the **price-to-rent ratio** and the share of rent consumed by taxes and insurance; and to weigh investing near home against investing far away. Then you will read a **neighborhood** the way Jane Jacobs read Hudson Street — on foot, at different hours — and learn the investor's Class A, B, C and D shorthand as a description of buildings and economics, never of people, with fair-housing rules as settled law.

The middle of the unit is the craft of **comparables**. You will estimate what a home will really rent for from **rent comps**, adjusted for garages, laundry, bathrooms and utilities, and checked against HUD's Fair Market Rents; and you will estimate **after-repair value** from sold comps of renovated homes with an appraiser's adjustment grid. The unit ends with the law: **landlord–tenant rules differ by state**, and you will read Oregon's and Washington's statutes as of 2026 — rent-increase notice and limits, deposits, entry and termination — and learn to find and read your own state's act, then build the cost of compliance into the numbers.

PREREQUISITES

- Can compute ratios, percents, growth rates with an exponent and weighted averages
- Has completed Unit 1 and can run the Deal Analyzer's Rental worksheet from a listing
- Can find a real for-sale listing, rental listings and the county assessor's page for a property
- Has the deal binder started, with the Four Returns Sheet and the Ten-Year Goal page

MASTERY CHECKLIST

- ☐ I can build a market sheet from public data and compute population growth, household demand against permits, price-to-rent and the tax-and-insurance burden.
- ☐ I can compare investing near home and far away in dollars and in risk.
- ☐ I can classify a property and a neighborhood as A, B, C or D from evidence about buildings and economics, and set Deal Analyzer assumptions to fit.
- ☐ I can describe a neighborhood and write a rental ad in fair-housing terms, describing the home and never the people.
- ☐ I can build and reconcile a rent-comp grid, adjusting for features and utilities, and use HUD Fair Market Rents correctly as a benchmark.
- ☐ I can build an ARV grid from sold renovated comps with time, size and feature adjustments, and check it with price per square foot.
- ☐ I can state Oregon's and Washington's 2026 rent-increase notice and limits, deposit deadlines and entry notice, and compute a lawful increase and a deposit deadline.

- ☐ I can find and read my own state's landlord–tenant statute and build compliance costs into an analysis.

OPTIONAL BOOKS AND RESOURCES FOR THIS UNIT

- **School Launch Deal Analyzer**: Free. Use the Rental worksheet for market and rent-comp analyses and the BRRRR and Fix & flip worksheets to see how ARV drives a deal. Used in every project this unit. Ages 13 and up.
- **U.S. Census Bureau: American Community Survey**: Free and official. Yearly estimates of population, household income, median gross rent and home values for counties, cities and smaller areas — the core of the Lesson 2.1 market sheet. Ages 14 and up.
- **HUD User: Fair Market Rents**: Free and official. HUD's Fair Market Rents by county and bedroom count, with methodology documents explaining that FMRs are gross rents at the 40th percentile. Use as a benchmark in Lesson 2.3, never as market rent. Ages 14 and up.
- **Long-Distance Real Estate Investing, by David Greene (BiggerPockets Publishing)**: A printed book from the publisher's own store. A practical guide to choosing a market and building a local team when investing far from home, with useful chapters on evaluating neighborhoods and comps. Read with Lessons 2.1–2.2. Ages 15 and up.
- **Washington State Legislature: RCW 59.18, Residential Landlord-Tenant Act**: Free and official. The full text of Washington's landlord–tenant act, including the rent-increase, deposit and entry sections cited in Lesson 2.5; Oregon's act is ORS chapter 90 on the Oregon Legislature's website. Use it to practice reading a statute by section. Ages 15 and up.

Not required. Every project in this unit works without them. School Launch has no ties to these authors, publishers or companies.

LESSONS IN THIS UNIT

2.1 Choosing a Market: Jobs, People and Price-to-Rent — 3 sessions of 50 minutes

2.2 Reading a Neighborhood: Property Classes and Tenant Demand

3 sessions of 50 minutes

2.3 Rent Comps: What Will It Really Rent For? — 3 sessions of 50 minutes

2.4	**Sale Comps and After-Repair Value**	3 sessions of 50 minutes
2.5	**Landlord–Tenant Law Differs by State**	3 sessions of 50 minutes

Unit 2 test

Closed notes, basic calculator only. Twenty four-choice questions, 5 points each, 100 points total. Allow about two minutes per question — set a timer for 40 minutes. Show the arithmetic for every calculation question on scratch paper. Choose the one BEST answer; aim for 80% (16 of 20) or better, and rework every miss. Figures marked "in this example" are examples, and statutory figures are stated as of 2026 — always check the current law.

1. **5 pts**

   In this example, a house sells for $270,000 and rents for $1,800 a month. What is its price-to-rent ratio?

   A. 150

   B. 12.5

   C. 0.67

   D. 15.0

2. **5 pts**

   Which sequence best describes how rental demand is created in a market?

   A. Jobs bring people, people form households, and households need housing

   B. New houses attract jobs, which attract people

   C. Low prices create jobs

   D. Building permits create population growth

3. **5 pts**

   In this example, a rental pays $4,200 in taxes and $1,800 in insurance a year and rents for $2,000 a month. What is the tax-and-insurance burden?

   A. 17.5%

   B. 20%

   C. 30%

   D. 25%

4. 5 pts

In this example, a city adds about 1,200 households a year while builders complete about 2,500 new rental and for-sale units a year for several years. A landlord there should most expect:

A. Rapidly rising rents

B. No change, since permits do not affect rents

C. Rising vacancy and pressure on rents as supply outruns demand

D. Higher property taxes only

5. 5 pts

In investor shorthand, a neighborhood's class (A, B, C or D) should describe:

A. The people who live there

B. The buildings' age and condition, rents, vacancy and price trends

C. The religion or national origin of the area

D. The tenants a landlord prefers

6. 5 pts

In this example, a $130,000 older house in a Class C area rents for $1,300. The best conclusion is:

A. It passes the 1% rule, so it will cash-flow

B. It fails the 1% rule

C. Class C areas never cash-flow

D. It passes the 1% rule, but vacancy, repairs, CapEx and turnover must be raised to Class C levels before judging it

7. 5 pts

Which rental ad phrase violates the federal Fair Housing Act?

A. "No children"

B. "Fenced yard and garage"

C. "Two blocks to the bus line"

D. "No smoking"

8. 5 pts

In this example, tenants stay two years on average, each turnover costs $2,400, and rent is $1,500 a month. What is the annual turnover cost as a percent of rent?

A. 13.3%

B. 5.0%

C. 6.7%

D. 10%

9. 5 pts

Which is the best evidence of a unit's market rent?

A. The highest asking rent on a listing site

B. The rent a tenant actually agreed to pay for a similar nearby unit recently

C. The seller's pro forma rent

D. HUD's Fair Market Rent

10. 5 pts

In this example, the subject has no garage and its tenant pays all utilities. A comp leased for $1,900 with a garage (worth $75) and water, sewer and garbage included (about $100). What is the comp's adjusted rent?

A. $1,725

B. $2,075

C. $1,825

D. $1,800

11. 5 pts

HUD's Fair Market Rents are best described as:

A. Gross rents (shelter plus most utilities) at the 40th percentile of standard-quality units for recent movers

B. The average asking rent on listing sites

C. The maximum rent any landlord may legally charge

D. Net rents after utilities at the 75th percentile

12. 5 pts

In this example, market rent is $1,800. An owner asks $75 more and the unit sits 20 extra days. In the first year, the owner:

A. Gains $900

B. Breaks even exactly

C. Gains $1,184

D. Loses about $284

13. 5 pts

A seller's pro forma claims market rent of $2,300; your five adjusted comps cluster at $1,950. What should you enter in the Rental worksheet?

A. $2,300, since the seller knows the property

B. The average of the two numbers

C. $1,950, the rent supported by comps, and verify any existing leases

D. Nothing until an appraisal is ordered

14. 5 pts

To estimate the after-repair value of a dated house you plan to renovate fully, you should use:

A. Active listings of renovated homes

B. Sales of dated, unrenovated homes nearby

C. The county's assessed value

D. Recent sold comps of similar, renovated homes nearby, adjusted for differences

15. 5 pts

In this example, a comp sold 4 months ago for $400,000 in a market rising 0.5% a month. What is its time-adjusted price?

A. $408,000

B. $402,000

C. $392,000

D. $420,000

16. 5 pts

In this example, an investor estimates ARV at $320,000 with a $50,000 rehab, but the true ARV is $300,000. By how much is her 70% rule maximum offer too high?

A. $20,000

B. $14,000

C. $6,000

D. $35,000

17. 5 pts

An investor analyzing a house in Idaho, which has no obligation to publicly disclose sale prices, can best find sold-price evidence by:

A. Using asking prices instead

B. Guessing from price per square foot of listings

C. Working with an agent who can pull closed sales from the MLS, and checking assessor and appraiser data where available

D. Skipping comps

18. 5 pts

As of 2026, an Oregon landlord's tenant of three years in a 1990 building pays $1,600. The 2026 limit is 9.5%. What is the maximum lawful new rent for an increase taking effect in 2026, and the minimum notice?

A. $1,760, 30 days

B. $1,752, 90 days' written notice

C. $1,752, 30 days

D. Any amount, 90 days

19. 5 pts

As of 2026, Washington's Residential Landlord-Tenant Act requires a landlord, except in emergencies, to give what notice before entering a tenant's unit to make repairs?

A. At least two days' written notice

B. No notice

C. 24 hours' verbal notice

D. 30 days' notice

20. **5 pts**

A tenant stops paying rent. In every state, which is the only lawful way for a landlord to regain possession?

A. Changing the locks while the tenant is out

B. Shutting off the utilities until the tenant leaves

C. Removing the tenant's belongings to the curb

D. Giving the notice the state requires and, if needed, obtaining a court judgment and having the sheriff enforce it

ANSWER KEY

1. B. $\$270{,}000 \div (\$1{,}800 \times 12) = \$270{,}000 \div \$21{,}600 = 12.5$. A divides by monthly rent; C is the rent-to-price ratio in percent.
2. A. Housing demand is derived from jobs and the people they bring, as Anchorage's 1915 tent city showed. New construction adds supply; it does not create demand (B, D).
3. D. $\$6{,}000 \div \$24{,}000 = 25\%$ of rent goes to taxes and insurance before any other cost. A counts taxes only.
4. C. New supply far above household growth means more units competing for fewer tenants — Hoyt's overbuilding pattern. Raise the vacancy assumption and check rent comps.
5. B. Class is shorthand for buildings and economics. Describing or sorting the people who live there, or preferred tenants, conflicts with fair-housing law.
6. D. $\$1{,}300 \div \$130{,}000 = 1.0\%$ passes the screen, but Class C houses usually carry higher vacancy, repair, CapEx and turnover costs that can turn the cash flow negative.
7. A. It states a limitation based on familial status, a protected class. The others describe the property or apply equally to all applicants.
8. C. $\$2{,}400 \div 2 = \$1{,}200$ a year; $\$1{,}200 \div \$18{,}000 \approx 6.7\%$. A forgets to divide by the two-year tenancy.
9. B. A recent leased rent for a truly comparable unit is the strongest evidence. Asking rents may never lease, pro formas are sales pitches, and FMR is a gross rent at the 40th percentile.
10. A. The comp is better on both points, so subtract: $\$1{,}900 - \$75 - \$100 = \$1{,}725$. B adds instead of subtracting.
11. A. FMRs are gross rents at the 40th percentile. They are not legal limits (C) and must be adjusted for tenant-paid utilities before comparing with a market rent.
12. D. Lost rent $\$1{,}800 \times 12 \div 365 \times 20 \approx \$1{,}184$; extra rent $\$75 \times 12 = \$900$; net about $-\$284$.
13. C. Comps are the evidence; a pro forma is a claim. Averaging in an unsupported figure (B) still overstates income.
14. D. ARV comes from closed sales in the same condition the subject will be in after repairs. Unrenovated sales (B) show as-is value, not ARV; listings (A) are not sales.

15. A. $\$400{,}000 \times 0.005 \times 4 = \$8{,}000$; rising prices mean the older sale is adjusted up to $408,000. C adjusts the wrong way.
16. B. Her offer $\$320{,}000 \times 0.70 - \$50{,}000 = \$174{,}000$; true $160,000; too high by $14,000, which is 70% of the ARV error.
17. C. In non-disclosure states, closed-sale data comes mainly from the MLS through an agent, and from assessor, appraiser or title sources where shared.
18. B. $\$1{,}600 \times 1.095 = \$1{,}752$, with at least 90 days' written notice and no more than one increase in 12 months (ORS 90.323–90.324). A uses 10%.
19. A. RCW 59.18.150 requires at least two days' written notice (one day to show the unit to prospective tenants or buyers). Oregon's rule, 24 hours' actual notice (C), is a different state's law.
20. D. Eviction is a court process after proper notice. Lockouts, utility shutoffs and removing belongings are unlawful self-help everywhere.

PORTFOLIO PIECE: THE DEAL BINDER — MARKETS AND COMPS

Add this unit's five pieces to your deal binder: My Market Sheet for your county and one comparison market, with growth rates, household demand against permits, price-to-rent and tax-and-insurance burden (2.1); the Neighborhood Walk with three timed walks, official data, a class rating with building-based reasons and a fair-housing-compliant description (2.2); the Rent-Comp Grid with four to six adjusted comps, a reconciled rent and an FMR check (2.3); the ARV Grid with sold renovated comps, adjustments, gross-adjustment percents and a price-per-square-foot check, run in the Fix & flip and BRRRR worksheets at full and reduced ARV (2.4); and My State's Landlord–Tenant Sheet with section numbers, a lawful-increase and deposit-deadline calculation, and a compliance-adjusted Rental worksheet (2.5).

Each analysis ends with a printed worksheet and a one-paragraph verdict — buy, negotiate to a stated price, or walk away. Every input carries its source and date; every statute carries its section number and the date you read it.

LOOK FOR	WHAT IT MEANS
Market sheet	Data come from official public sources with dates; growth, household demand, permits, price-to-rent and burden are computed correctly; the comparison and verdict are supported by the numbers.
Neighborhood walk	Three walks at different times are recorded on public streets; official data are used and compared like with like; the class rating rests only on buildings and economics; the property description is fair-housing compliant.
Rent comps	Comps match the subject, adjustments go in the right direction with stated values, utilities are handled correctly, the reconciliation is explained, and FMR is used only as a benchmark.
ARV grid	Only sold comps in the renovated condition class are used; time, size and feature adjustments are correct; gross adjustments guide the weights; and the deal is tested at a lower ARV.
Landlord–tenant sheet	Every rule cites a section of the official statute with the date read; calculations of a lawful increase and a deposit deadline are correct; compliance costs appear in the worksheet; the law is described as mechanics without opinion.

LOOK FOR	WHAT IT MEANS
Records and judgment	Every worksheet is printed with sources noted, and each verdict — including walking away — is defended with the evidence gathered.

2.1 Choosing a Market: Jobs, People and Price-to-Rent

OBJECTIVES

- Explain how population growth, job growth, employer diversity and household income create rental demand, and how new construction (permits) adds supply.
- Compute and interpret the price-to-rent ratio and the rent-to-price ratio for a market and a single property.
- Compare markets by the share of rent consumed by property taxes and insurance, and by landlord–tenant rules, as part of the numbers.
- Find free public data on population, jobs, rents and building permits from the Census Bureau, the Bureau of Labor Statistics, HUD and local governments.
- Weigh the trade-offs of investing near home against investing far away, in dollars and in risk.

> **Warm-up.** Name three large employers in your town or county. For each, write what would happen to the local rental market if it hired 2,000 people next year — and what would happen if it closed. Then guess: is it a good thing for a landlord when one employer provides most of a town's jobs?

WATCH

How to Research Real Estate Markets in 4 Steps

Real Estate Rookie · 11:43

https://www.youtube.com/watch?v=CyxeNqugWNU

> **WHEN TO WATCH**
> Watch after the fourth core idea. As he walks through population, jobs, prices, rents and inventory for one city, fill in the same rows for your own county in your notebook. Skip the agent-matching promotion.

BACKUP VIDEO

Renting versus Buying a home | Housing | Finance & Capital Markets | Khan Academy

Khan Academy · 11:37

https://www.youtube.com/watch?v=JNL6f1xkie4

Watch before Worked Example 1. Sal Khan compares the cost of renting with the cost of owning; note how the house price and the monthly rent drive his answer, then compute the price-to-rent ratio for your own town.

KEY TERMS

market

For investors, a metropolitan area, county or city whose jobs, population, prices and rents move together.

price-to-rent ratio

A property's or market's price divided by its annual rent; lower ratios mean rents are high relative to prices.

rent-to-price ratio

Monthly rent divided by price, stated as a percent; the measure behind the 1% rule screen.

employer diversity

The spread of a market's jobs across many employers and industries, which reduces the damage from any one layoff.

household formation

The creation of new households — people moving in, young adults leaving home — that each need a place to live.

building permits

Official approvals to build new housing units; a leading measure of how much new supply is coming.

tax and insurance burden

Annual property taxes plus insurance divided by annual rent; the share of rent that disappears before any other expense.

landlord-friendliness

Investor shorthand for how a state's and city's landlord–tenant laws affect notice periods, rent limits, eviction timelines and compliance costs.

long-distance investing

Owning rental property in a market far from home, usually relying on a local agent, property manager and contractors.

American Community Survey (ACS)

The Census Bureau's ongoing survey that publishes yearly estimates of population, income, housing costs and rents for counties, cities and smaller areas.

CORE IDEAS

The story. In the spring of 1915 the federal government chose a spot at the mouth of Ship Creek on Alaska's Cook Inlet as the construction headquarters for a new railroad to the interior. Within weeks, workers and their families poured in, and by summer a city of white canvas tents stood on the flats — people called it the "White City." There were jobs, so there were people; there were people, so they needed places to live, stores and services. The government had the bluff above the creek surveyed into a townsite, and on July 10, 1915, its land office began auctioning the lots. Over the following days about 655 lots sold for nearly $150,000, some single lots bringing several hundred dollars. That was the beginning of Anchorage. The order of events is the lesson: the railroad brought the jobs, the jobs brought the people, the people created demand for housing, and only then did the land have value. Every rental market on earth runs on the same chain.

How they figured it out. In 1933 a Chicago real estate broker and economist named Homer Hoyt published *One Hundred Years of Land Values in Chicago*, a study of a century of land prices block by block from the 1830s on. He found that land values rose and fell in long waves that followed population growth, new transportation lines and bursts of building — and that booms often ended in overbuilding, when new supply outran the people arriving to fill it. Investors and appraisers have used his insight ever since: watch **demand** (people and jobs) and **supply** (new construction) together. Today the raw material is free. The Census Bureau's **American Community Survey** publishes population, income, rents and home values

for counties and cities; the Bureau of Labor Statistics publishes local jobs and unemployment; the Census Bureau's building-permits survey and city permit offices show new supply; HUD publishes Fair Market Rents. A student with a laptop can do what Hoyt did with a decade of ledgers.

The big idea. A good rental market has growing, diverse **demand**, reasonable **supply**, and prices that are not too high for the rents. Demand comes from **population growth** and **household formation**, from **job growth** spread across many employers and industries (**employer diversity**), and from rising incomes that let tenants pay rent. Supply comes from new construction, which **building permits** forecast a year or two ahead. The **price-to-rent ratio** — price divided by annual rent — tells you whether rents can carry prices: in this example, a $240,000 house renting for $1,700 a month has a ratio of $240,000 ÷ $20,400 ≈ 11.8. Its mirror, the **rent-to-price ratio** (monthly rent ÷ price, about 0.71% here), is the number behind the 1% rule screen (Unit 3). Lower price-to-rent ratios make cash flow possible; very low ratios often signal higher risk, older buildings or weaker demand.

Demand needs more than a headline. Population growth matters most when it comes with jobs; a town growing only by retirees, or a town where one plant or base provides most of the paychecks, carries **concentration risk**. Look for several large employers in different industries — health care, education, government, manufacturing, logistics — and for incomes rising at least as fast as rents. Compare demand with supply: in this example, a county adds about 21,000 people in five years. At about 2.5 people per household, that is roughly 8,400 new households, or 1,680 a year; if builders are permitting only about 1,100 new units a year, about 580 households a year must squeeze into existing housing, pushing rents and occupancy up. Reverse the numbers — a permit boom in a slow-growing town — and landlords compete for tenants with concessions and falling rents. Hoyt's overbuilding warning is a permit count you can look up.

Some of a market's most important numbers are expenses. Property taxes and insurance are fixed costs paid before anything else, and they vary enormously by place. Divide them by annual rent to get the **tax and insurance burden**. In this example, City A's median home ($420,000, rent $2,100) carries $5,800 of taxes and insurance, 23.0% of rent; City B's ($240,000, $1,700) carries $6,240 because of storm insurance, 30.6% of rent; City C's ($165,000, $1,450) carries $4,800, 27.6%. Taxes can also jump after a sale when the county reassesses to the purchase price — check your

county's rules. **Landlord–tenant law** is part of the numbers too: notice periods, rent-increase limits, relocation payments and eviction timelines change vacancy, legal and turnover costs (Lesson 2.5). Investors call this **landlord-friendliness**; this course treats it simply as one more input to measure honestly and comply with fully.

Should you invest near home or far away? **Investing near home** lets you see the property, know the streets, manage it yourself, and meet problems in person; your knowledge is an edge. But your home market may have high price-to-rent ratios, and a family that owns its house, works and invests in one town has concentrated its risk. **Long-distance investing** can reach markets where rents are higher relative to prices, but you must rely on a local agent, manager and contractors you rarely see, pay for management and travel, and accept that you will learn about problems late. In this example, a near-home house (City A) self-managed leaves about 4.3% of the price after vacancy, taxes and insurance; a far-away City C house leaves about 5.3% even after a 10% manager and $1,200 a year of travel. The far deal looks better on paper; whether it is better depends on the team you can trust there. Many investors begin near home to learn, and go far only with a proven system.

Run the numbers. Before analyzing a single house, build a one-page market sheet: population and job trends, the largest employers, median household income, median rent and median home value from the ACS, permits per year, typical property-tax rate, an insurance quote range, and a summary of the state's landlord–tenant rules. Then compute the market's median price-to-rent ratio and tax-and-insurance burden. In the Rental worksheet, enter a median-priced house at median rent with the market's real taxes and insurance; if the median deal loses money (it often will), you know you must find below-median prices, not average ones. The classic mistakes: choosing a market because a podcast called it "hot"; counting population growth without checking jobs and permits; using a national insurance or tax average instead of a local quote; ignoring a state's rent and notice rules; and buying far away without a team you have checked.

PICTURE STUDY



Anchorage, Alaska: "The White City", Alberta Pyatt, July 1, 1915 · Photograph · Anchorage Museum (Pyatt-Laurence Collection)

Image: Wikimedia Commons, public domain

Alberta Pyatt photographed the railroad camp at Ship Creek in the summer of 1915, nine days before the government began auctioning lots on the bluff above it. Her handwritten caption calls the tent town "The White City," the name its residents used. Nothing here is permanent yet — canvas, lumber, a few frame buildings — but the people have arrived because the jobs have arrived. The picture opens this lesson because it shows the first link in every housing market's chain: work brings people, and people need homes.

Look closely

- Count, roughly, the tents you can see. Each one is a household that needed shelter. What does that tell you about demand?
- Look at the frame buildings in the foreground. Who might have built them first, and why?
- Notice the forest and mountains closing in behind the flats. How does geography limit where a town can grow — and what does that do to land prices?
- Find any sign of roads, utilities or permanent streets. What would have to come next before these tents became a neighborhood of houses?

Talk about it

1. If the railroad had been cancelled in August 1915, what would have happened to the value of the lots auctioned in July?
2. Which data in this lesson — jobs, population, permits, price-to-rent — could you have measured in this photograph, and how?
3. Jeremiah told the exiles to build houses and seek the peace of their city. What would it mean for a family arriving in this tent city to seek its peace?

PROJECT

My Market Sheet

You will build a one-page market profile of your own county or metro area from free public sources, then compare it with one other market of your choice. Everything you need is on official websites; no one needs to be contacted.

The market sheet goes in the front section of your deal binder and is updated each year.

You will need

- The Census Bureau's American Community Survey tables (data.census.gov) or QuickFacts for your county and city
- The Bureau of Labor Statistics local area unemployment and employment data, or your state employment department's county reports
- Your county assessor's typical tax rate and a landlord insurance quote range (from a published source or a parent's agent, with permission)
- The Deal Analyzer, Rental worksheet

Steps

1. Record population for the latest year and five years earlier; compute the annual growth rate.
2. Record the unemployment rate, total jobs trend and the five largest employers with their industries; rate employer diversity as strong, fair or weak with one reason.
3. Record median household income, median gross rent and median home value from the ACS; compute the price-to-rent and rent-to-price ratios.
4. Find the number of housing units permitted last year (city or county permit office or the Census building-permits survey) and compare with household growth as in Worked Example 2.
5. Compute the tax-and-insurance burden for a median house, and summarize in two sentences your state's landlord–tenant rules from its official statute page (see Lesson 2.5).

6. Repeat steps 1–5 in brief for one other market and enter a median house from each in the Rental worksheet.
7. Print both worksheets and write a one-paragraph verdict: which market better fits a beginning investor in your family, and what price would make a median house work. File it in the deal binder.

INVESTOR'S NOTEBOOK

1. Flashcards: price-to-rent ratio, rent-to-price ratio, employer diversity, household formation, building permits, tax and insurance burden, landlord-friendliness.
2. Draw the demand chain as arrows: jobs → people → households → rent → land value, with a second arrow showing permits adding supply.
3. Trap list "Markets": ending with — Population without jobs, or growth with a permit boom, is not demand.

KEY FORMULAS

$$\text{Price-to-rent ratio} = \frac{\text{price}}{\text{monthly rent} \times 12}$$

$$\text{Rent-to-price ratio} = \frac{\text{monthly rent}}{\text{price}}$$

$$\text{Tax and insurance burden} = \frac{\text{annual taxes} + \text{annual insurance}}{\text{annual rent}}$$

$$\text{Annual growth rate} = \left(\frac{\text{ending value}}{\text{starting value}}\right)^{1/n} - 1$$

$$\text{New households} \approx \frac{\text{population added}}{\text{average household size}}$$

From history. Homer Hoyt did not study land values from a distance. From 1925 he worked in Chicago as a real estate broker and consultant, watching the 1920s boom and the crash that followed from inside the market, while gathering a century of records for his University of Chicago dissertation. The finished book used 103 maps and 103 tables to trace Chicago's land prices from 1830 to 1933, and it remains one of the most cited studies ever written on how cities and land values grow.

Example 1. Compare three markets in this example. City A: median price $420,000, median rent $2,100, taxes $4,200, insurance $1,600. City B: $240,000, $1,700, taxes $3,840, insurance $2,400. City C: $165,000, $1,450, taxes $3,300, insurance $1,500. Find each price-to-rent ratio, tax-and-insurance burden, and the rent left after taxes and insurance as a percent of price.

Show solution

1. Annual rents: A $25,200; B $20,400; C $17,400.
2. Price-to-rent: A $420,000 ÷ $25,200 ≈ 16.7; B ≈ 11.8; C ≈ 9.5.
3. Burden: A $5,800 ÷ $25,200 ≈ 23.0%; B $6,240 ÷ $20,400 ≈ 30.6%; C $4,800 ÷ $17,400 ≈ 27.6%.
4. Rent left ÷ price: A $19,400 ÷ $420,000 ≈ 4.6%; B $14,160 ÷ $240,000 ≈ 5.9%; C $12,600 ÷ $165,000 ≈ 7.6%.

Answer: City C has the lowest price-to-rent ratio and the most rent left per dollar of price; City B's insurance eats almost a third of its rent. In the Rental worksheet at 25% down and 7%, none of the three median houses cash-flows (A about −$1,056, B −$484, C −$171 a month) — the investor must find below-median prices, not median ones.

Example 2. In this example, a county grew from 210,000 to 231,000 people in five years. Households average 2.5 people, and builders have permitted about 1,100 new housing units a year. Find the annual growth rate and compare household growth with new supply.

Show solution

1. Growth rate: $(231{,}000 \div 210{,}000)^{1/5} - 1 = 1.10^{0.2} - 1 \approx 1.92\%$ a year.
2. People added: 21,000; households ≈ 21,000 ÷ 2.5 = 8,400, about 1,680 a year.
3. Shortfall: 1,680 − 1,100 = 580 households a year more than new units.

Answer: About 1.9% growth a year with demand outrunning permits by roughly 580 households a year — a sign of firm rents and low vacancy, provided the jobs behind the growth are diverse. Check the same numbers every year; a permit surge can reverse the picture.

Example 3. In this example, compare a near-home house in City A (price $420,000, rent $2,100, taxes and insurance $5,800, self-managed) with a far-away house in City C (price $165,000, rent $1,450, taxes and insurance $4,800, a 10% manager, and $1,200 a year of travel). Use 6% vacancy. What is left after these costs as a percent of price?

Show solution

1. Near: collected rent $\$25{,}200 \times 0.94 = \$23{,}688$; minus $5,800 = $17,888; $\div \$420{,}000 \approx 4.3\%$.
2. Far: collected $\$17{,}400 \times 0.94 = \$16{,}356$; manager $1,635.60.
3. Far remainder: $\$16{,}356 - \$1{,}635.60 - \$4{,}800 - \$1{,}200 = \$8{,}720.40$; $\div \$165{,}000 \approx 5.3\%$.

Answer: About 4.3% near home versus 5.3% far away — before repairs, CapEx and debt. The far deal earns more per dollar on paper; the near deal earns the owner's knowledge, control and quicker response. Run both fully in the Rental worksheet and weigh the team you can actually trust.

PRACTICE

1. Easy In this example, a house costs $300,000 and rents for $2,000 a month. Find the price-to-rent ratio.

   Show answer

   $\$300{,}000 \div \$24{,}000 = 12.5$.

2. Easy For the same house, find the rent-to-price ratio.

   Show answer

   $\$2{,}000 \div \$300{,}000 \approx 0.67\%$.

3. Easy Name three free public sources of market data and what each provides.

   Show answer

   Census Bureau ACS (population, income, rents, home values); Bureau of Labor Statistics (jobs and unemployment); city or Census building-permit data (new supply). HUD Fair Market Rents is a fourth.

4. **Medium** In this example, taxes are $3,600 and insurance $1,800 on a house renting for $1,500 a month. Find the tax-and-insurance burden.

Show answer

$\$5{,}400 \div \$18{,}000 = 30\%$ of rent is gone before repairs, vacancy, management or the mortgage.

5. **Medium** In this example, a city grew from 80,000 to 86,000 people in four years. Find the annual growth rate.

Show answer

$(86{,}000 \div 80{,}000)^{1/4} - 1 = 1.075^{0.25} - 1 \approx 1.82\%$ a year.

6. **Medium** Why is a town where one employer provides most of the jobs riskier for a landlord, even if it is growing?

Show answer

Concentration risk: if that employer cuts jobs or closes, many tenants leave or cannot pay at once, vacancies rise and rents fall across the whole town.

7. **Medium** In this example, a market adds 3,000 households a year and permits 5,200 new units a year for three years. What would you expect to happen to rents and vacancy, and why?

Show answer

New supply exceeds new households by 2,200 units a year, so vacancies rise and landlords compete with lower rents or concessions until demand catches up — Hoyt's overbuilding pattern.

8. **Hard** In this example, Market X has a price-to-rent ratio of 9 and Market Y has 18. Give one reason an investor might still choose Y, and one reason to be cautious about X.

Show answer

Y may have stronger, more diverse job growth, newer buildings, lower vacancy and more appreciation, suiting an investor with a large down payment. X's low ratio may reflect weak demand, older buildings with high repair costs, high taxes or insurance, or high vacancy — check them before trusting the ratio.

9. Hard In this example, a county reassesses a home to its purchase price. The prior owner's tax bill was $2,100 on an assessed value of $150,000; you buy for $240,000 at the same rate. What tax should you enter?

Show answer

Rate $\$2{,}100 \div \$150{,}000 = 1.4\%$; new tax $\$240{,}000 \times 0.014 = \$3{,}360$. Using the seller's old bill would understate expenses by $1,260 a year.

10. Hard List two advantages and two disadvantages of investing far from home.

Show answer

Advantages: access to markets with lower price-to-rent ratios; diversification away from your home town. Disadvantages: dependence on a manager and contractors you rarely see, with management and travel costs; slower discovery of problems and less local knowledge.

11. Challenge In this example, Market P: median price $200,000, rent $1,600, taxes 2.2% of value, insurance $1,400. Market Q: $260,000, rent $1,900, taxes 0.9%, insurance $1,100. Which leaves more rent after taxes and insurance per dollar of price?

Show answer

P: $\$19{,}200 - \$4{,}400 - \$1{,}400 = \$13{,}400$; $\div \$200{,}000 = 6.7\%$. Q: $\$22{,}800 - \$2{,}340 - \$1{,}100 = \$19{,}360$; $\div \$260{,}000 \approx 7.4\%$. Q wins despite its higher price-to-rent ratio (11.4 vs. 10.4), because its taxes are much lower.

12. Challenge Explain, using the Anchorage story and Hoyt's study, why an investor should study jobs before studying houses.

Show answer

Housing demand is derived from jobs: Anchorage's lots had value only because the railroad brought workers, and Hoyt found land values following population and transportation. A good house in a market losing jobs will struggle; an ordinary house where jobs and households are growing faster than supply will usually rent.

COMMON MISTAKES

- Choosing a market because it is called "hot" rather than by measured jobs, population, permits and price-to-rent.

- Counting population growth without checking whether jobs, incomes and new supply support it.
- Using the seller's old tax bill or a national insurance average instead of a reassessment estimate and a local quote.
- Treating a low price-to-rent ratio as automatically good. It can signal weak demand, high taxes, older buildings or high vacancy.
- Ignoring landlord–tenant law. Notice periods, rent limits and eviction timelines are costs that belong in the analysis.
- Buying far away with no tested local team, or near home without noticing that your job, house and rentals all depend on one town.

Make it a game · Market Detective. Make cards for ten real counties or cities with five facts each: population trend, largest employer, median rent, median home value and tax rate. Deal one card face down to each player. Players take turns asking yes-or-no questions ("Is your price-to-rent ratio under 12?") to guess which city another player holds. Correct guesses score one point; a player who can also say whether their own city would carry a median rental scores a bonus point.

Scripture. "And seek the peace of the city whither I have caused you to be carried away captives, and pray unto the LORD for it: for in the peace thereof shall ye have peace." (Jeremiah 29:7, KJV)

Jeremiah told the exiles to build houses in Babylon and to seek that city's good, because their welfare was bound up with it. An investor's welfare is bound up with a town in the same way: its jobs, its families and its peace are what give its houses value. A good landlord prays for and serves the city where he owns.

2.2 Reading a Neighborhood: Property Classes and Tenant Demand

OBJECTIVES

- Define Class A, B, C and D neighborhoods and properties as investor shorthand for buildings and economics, and state what each implies for rent, vacancy, turnover, repairs and appreciation.
- Adjust Deal Analyzer expense and vacancy assumptions to fit a property's class and show how the 1% rule can mislead.
- Evaluate a neighborhood's demand drivers — schools, transit, employers, shopping and condition — using official data and a walking survey at different times.
- Apply fair-housing rules to neighborhood analysis and advertising: describe properties and amenities, never the people who live there or should live there.
- Use official crime and safety data cautiously, comparing like with like and avoiding stereotypes.

> **Warm-up.** Picture the street where you live, or one you know well. In five minutes, write ten things a stranger could learn about it by walking it once on a Saturday morning — and three things they could learn only by walking it on a weekday evening. Circle the items that would affect what a house there rents for.

WATCH

ABCD Neighborhood Classes Explained | Real Estate Investing for Beginners

Casey Franchini · 12:24

https://www.youtube.com/watch?v=eOjwUfp9UT0

> **WHEN TO WATCH**
> Watch after the big idea. Write her description of A, B, C and D areas in terms of buildings, rents, vacancy and repairs only — the course's fair-housing rule — and note what each class means for your expense inputs.

BACKUP VIDEO

The Types of Real Estate Property Classes - A, B, C, & D Classes Explained

Danny Seeum · 5:13

https://www.youtube.com/watch?v=0hXCvi3WOL8

A short second pass before the practice set: list the trade-offs he gives for each property class and add the one you think matters most for a beginner.

KEY TERMS

neighborhood class

Investor shorthand (A, B, C, D) rating an area by its buildings' age and condition, rents, vacancy and price trends — never by who lives there.

property class

A rating of an individual building by age, condition, finishes and amenities; a Class B house can stand in a Class C area and vice versa.

Class A

Newer or fully renovated property in a high-demand area with the highest rents, lowest vacancy and repairs, and usually the lowest cap rates.

Class B

Older but well-maintained property in a stable area with solid demand, moderate rents and moderate repairs.

Class C

Older, dated property needing more maintenance, with lower rents, higher turnover and vacancy, and usually higher cap rates.

Class D

Distressed property or area with very high vacancy, turnover and repair costs; management-intensive and unsuited to beginners.

turnover

A tenant moving out and a new one moving in, with its costs in vacancy, cleaning, paint, repairs and leasing.

steering

Illegally guiding a buyer or renter toward or away from a neighborhood because of a protected characteristic; prohibited by the Fair Housing Act.

discriminatory advertising

Any ad or statement indicating a preference, limitation or discrimination based on a protected class; prohibited by the Fair Housing Act.

walking survey

A planned walk of a neighborhood at different times of day and week, recording property condition, supply, traffic, amenities and activity.

CORE IDEAS

The story. In 1961 a writer named Jane Jacobs, who lived with her family on Hudson Street in New York's Greenwich Village, published *The Death and Life of Great American Cities*. She had no degree in planning. What she had was a habit of watching. Morning after morning she noticed the same rhythm on her block: the shopkeepers opening up, children walking to school, workers hurrying to the bus, neighbors greeting each other, and in the evening the same street coming alive again. She called it the "sidewalk ballet," and she argued that a street works when it has many uses at many hours — homes, small stores, workplaces — and many "eyes on the street" watching over it. Planners had judged neighborhoods from maps and statistics; Jacobs judged them by walking them, at different hours, and paying attention to what buildings and blocks actually did. Every investor who walks a street before buying on it is borrowing her method.

How they figured it out. Investors needed a quick way to describe neighborhoods and buildings, and they borrowed one from commercial real estate, where office buildings had long been graded Class A, B and C by age, quality and rent. But the

Fair Housing Act of 1968 set a firm boundary on how housing could be described. It made it unlawful to make, print or publish any notice, statement or advertisement for the sale or rental of a dwelling that indicates a preference, limitation or discrimination based on a protected class, and it outlawed **steering** — guiding buyers or renters toward or away from areas because of who they are. Later amendments added sex (1974) and familial status and disability (1988) to race, color, religion and national origin. The lesson for investors is settled and simple: grade **properties and economics** — building age, condition, rents, vacancy, turnover, price trends — and never the people. A neighborhood's class is a description of its houses and its numbers.

The big idea. Class A areas and buildings are newer or fully renovated, in high demand, with the highest rents, the lowest vacancy and repairs, and usually the highest prices relative to rent — strong for appreciation, weak for cash flow. **Class B** are older (often 15–40 years in this example) but well kept, with steady demand and moderate rents and repairs — often the best balance for a beginner. **Class C** are older and dated, with more deferred maintenance, lower rents, more turnover and vacancy, and prices that make the rent look high — strong cash flow on paper, more work and repairs in practice. **Class D** are distressed buildings or blocks with very high vacancy, turnover and repair needs — not a place for beginners. Two cautions. A **property class** and a **neighborhood class** are separate: a renovated house can stand on a tired street. And the letters are rough shorthand that different investors use differently; what matters is the numbers each class implies.

Each class changes your Deal Analyzer inputs. In this example, a careful investor might use vacancy of 4% in Class A, 6% in B, 8–10% in C and 12% or more in D; repairs of 4%, 6%, 8–10% and higher; and CapEx of 5%, 7%, 10% and higher, because older buildings need more. Turnover costs climb too: in this example, a Class A tenant who stays four years with a $2,500 turnover cost averages $625 a year, about 2.4% of a $2,200 rent; a Class C tenancy of 18 months with a $2,000 turnover cost averages about $1,333 a year, nearly 8% of a $1,400 rent. This is why the **1% rule** (monthly rent at least 1% of price) passes most often in C and D areas — and why passing it proves little. A $140,000 house renting for $1,400 passes the rule exactly, yet with Class C assumptions it loses about $111 a month at 25% down and 7%.

Demand in a neighborhood comes from what people can reach and rely on. **Schools** matter to families and to resale value; look up official school information from the

state or district. **Transit and commute** matter to every tenant: distance to bus or rail lines, highways and major employers. **Employers, shopping and services** — a grocery store, a clinic, a hospital, a university — create steady demand nearby. **Condition** tells the story of investment: well-kept yards and roofs, new construction and renovations suggest owners expect the area to hold value; many boarded windows, overgrown lots and "for rent" signs suggest weak demand or too much supply. Use **crime and safety data** only from official sources, such as a city police department's published statistics, and compare like with like — the same kind of offense, the same period, per resident — remembering that data describe places and events, not the character of the people who live nearby.

Nothing replaces a **walking survey**, done with a parent and on public streets. Walk the blocks around a property at three times: a weekday morning (traffic, parking, school activity), a weekday evening (noise, lighting, who is home, whether the street feels cared for) and a weekend afternoon. Count "for rent" and "for sale" signs, note the condition of nearby houses, listen for highway or rail noise, find the nearest bus stop and grocery, and look for construction. Then describe what you found the way the law requires you to describe property in an advertisement: by features and amenities, never by people. "Three bedrooms, fenced yard, two blocks to a bus line and a park" is a description of a home. Phrases such as "perfect for young professionals," "ideal for a quiet adult couple" or "no children" describe preferred people, and the last is plainly unlawful. Neighborhood analysis is about buildings, streets and economics; tenant selection is by written criteria applied to every applicant alike (Unit 8).

Run the numbers. Before entering a property in the Rental worksheet, decide its class from evidence — age, condition, rents and vacancy in the area — and set vacancy, repairs, CapEx and management to fit. Then run it twice: once with your class assumptions and once with the defaults, and see how much the verdict depends on them. In the stress test, Class C and D properties should be judged on the "Vacancy +5 points" and "CapEx +5 points" rows. Write the class and your reasons on the printed worksheet. The classic mistakes: using Class A expense assumptions on a Class C house because the 1% rule looked good; judging a neighborhood from a car at noon; using unofficial crime maps or rumors; describing a neighborhood or writing an ad in terms of the people who live there; and assuming a C area will "turn into" an A area quickly enough to rescue a weak deal.

PICTURE STUDY



Residential Area South of Volunteer Park, Capitol Hill, Seattle, Arthur Churchill Warner, Probably between 1900 and 1910 · Photograph · University of Washington Libraries, Special Collections (Arthur Churchill Warner Photographs)

Image: Wikimedia Commons, public domain

Arthur Churchill Warner was a Seattle photographer who recorded the city in its years of fastest growth, around the turn of the twentieth century. Here he stood at the edge of a brand-new neighborhood on Capitol Hill, south of Volunteer Park, as its curving streets, sidewalks and first big houses went in. The picture opens this lesson because it is a neighborhood caught in the act of becoming one — and because it shows exactly what an investor should read on a walk: the condition of streets and sidewalks, the age and quality of the houses, the empty lots still waiting, and the services that make people want to live there.

Look closely

- Follow the curving street and sidewalks. What do new paving, curbs and young trees tell you about the money and confidence going into this area?
- Look at the houses along the top. Are they similar to one another in size and style? How does that sameness affect value?
- Find the empty lots. What does unbuilt land tell an investor about future supply in a neighborhood?

- Notice the utility poles. What services had to arrive before anyone would rent or buy a house here?

Talk about it

1. In investor shorthand, what class would you give this neighborhood in 1905, and what class might it be fifty years later? Base your answer only on buildings and economics.
2. What would you look for on a weekday evening walk here that you cannot see in a daytime photograph?
3. Proverbs warns against devising evil against a neighbor who dwells securely by you. How should that verse shape the way an investor talks about the people of any neighborhood?

PROJECT

The Neighborhood Walk

With a parent, you will walk the blocks around one real rental listing at three different times and build a neighborhood profile from what you see and from official data. Stay on public sidewalks, do not photograph people or house numbers, and do not approach residents.

Then you will assign the property and the neighborhood a class, set your Deal Analyzer assumptions to match, and see whether the verdict changes.

You will need

- One real rental or for-sale listing (single-family or small multifamily)
- A clipboard checklist: condition, signs, noise, traffic, parking, amenities, construction
- Official data: your state or district's school information and your city police department's published statistics
- The Deal Analyzer, Rental worksheet

Steps

1. Map a four-block radius around the listing and mark the nearest bus stop, grocery store, school, park and large employer, with distances.
2. Walk on a weekday morning, a weekday evening and a weekend afternoon. Each time, record traffic, noise, parking, lighting and the condition of the nearest twenty houses (good, fair, poor).
3. Count "for rent" and "for sale" signs and any vacant or boarded buildings on each walk.
4. Look up official school information and published police statistics for the area; write two sentences on what they show, comparing like with like.
5. Assign a property class and a neighborhood class with three evidence-based reasons, describing buildings and economics only.
6. Run the listing in the Rental worksheet with default assumptions and again with your class assumptions for vacancy, repairs, CapEx and management. Record both cash flows.

7. Print the class-adjusted worksheet, write a fair-housing-compliant three-sentence description of the property, and add a verdict paragraph — buy, negotiate to a stated price, or walk away. File it in the deal binder.

INVESTOR'S NOTEBOOK

1. Flashcards for Class A, B, C and D: building age and condition, typical vacancy, repairs, CapEx, rent level and cap rate in this lesson's examples.
2. Draw a four-column table of class assumptions (vacancy, repairs, CapEx, management, turnover) to tape inside your binder.
3. Trap list "Neighborhoods": ending with — I grade buildings and numbers, never people; I describe homes, never who should live in them.

KEY FORMULAS

$$\text{Annual turnover cost} = \frac{\text{cost per turnover}}{\text{average years per tenancy}}$$

$$\text{Turnover cost as \% of rent} = \frac{\text{annual turnover cost}}{\text{monthly rent} \times 12}$$

$$1\%\text{ rule screen: } \frac{\text{monthly rent}}{\text{price} + \text{repairs}} \geq 1\%$$

From history. Jane Jacobs's method spread far beyond New York. In 1968 she moved with her family to Toronto, where she lived for the rest of her life and kept writing about how cities and their economies grow. Her advice to planners and citizens alike was to look before theorizing: go out, walk the streets and see what people actually do. Many city planning schools still assign her 1961 book in their first year.

Example 1. In this example, compare two houses at 25% down and 7% in the Rental worksheet. Class A: price $400,000, rent $2,200, taxes $4,400, insurance $1,500, vacancy 4%, repairs 4%, CapEx 5%, management 9%. Class C: price $140,000, rent $1,400, taxes $2,000, insurance $1,200, vacancy 10%, repairs 10%, CapEx 10%, management 10%. Apply the 1% rule, then compare monthly cash flow.

Show solution

1. 1% rule: A $\$2{,}200 \div \$400{,}000 = 0.55\%$ (fails); C $\$1{,}400 \div \$140{,}000 = 1.00\%$ (passes).
2. Rental worksheet, Class A: cash flow about $-\$764$ a month; cap rate about 3.7%.
3. Rental worksheet, Class C with Class C assumptions: about $-\$111$ a month; cap rate about 5.0%.
4. Class C with the default 6% vacancy, 6% repairs, 7% CapEx and 9% management: about $+\$50$ a month — the difference is entirely the class assumptions.

Answer: The Class A house fails both tests. The Class C house passes the 1% rule but loses about $111 a month once realistic Class C costs are entered. The verdict depends on honest class assumptions, not on the rule of thumb.

Example 2. In this example, Class A tenants stay an average of 4 years and each turnover costs $2,500 (vacancy, paint, cleaning, leasing) on a $2,200 rent. Class C tenants stay 1.5 years and each turnover costs $2,000 on a $1,400 rent. Compare annual turnover cost as a percent of rent.

Show solution

1. Class A: $\$2{,}500 \div 4 = \$625$ a year; $\$625 \div \$26{,}400 \approx 2.4\%$.
2. Class C: $\$2{,}000 \div 1.5 \approx \$1{,}333$ a year; $\$1{,}333 \div \$16{,}800 \approx 7.9\%$.

Answer: Turnover costs about 2.4% of rent in Class A and about 7.9% in Class C — more than three times as much. Raise the vacancy and repair percents in the Rental worksheet to carry that cost.

Example 3. Apply the fair-housing advertising rule step by step to this draft rental ad: “Charming 3-bedroom in a quiet adult neighborhood — perfect for a young professional couple. No children. Close to bus and park.”

Show solution

1. Find any phrase describing who should or should not live there: “quiet adult neighborhood,” “young professional couple,” “No children.”
2. Check against the protected classes: “No children” states a limitation based on familial status, which the Fair Housing Act prohibits; the other phrases signal a preference for certain households.
3. Keep the property facts: 3 bedrooms, quiet street, bus, park.
4. Rewrite using features and amenities only, adding the honest terms that apply to every applicant.

Answer: “3-bedroom, 2-bath home on a quiet street. Fenced yard, washer and dryer hookups. Two blocks to the bus line and a park. No smoking. Written rental criteria available on request.” The ad now describes the home, not the people.

PRACTICE

1. Easy In investor shorthand, what does a neighborhood’s class describe, and what must it never describe?

   Show answer

   It describes buildings and economics — age, condition, rents, vacancy, turnover and price trends. It must never describe or sort the people who live there.

2. Easy Which class usually offers the highest cash flow on paper and the most repairs and turnover in practice?

   Show answer

   Class C — lower prices relative to rent, but older buildings with higher repair, CapEx, vacancy and turnover costs.

3. **Easy** Name the seven federal fair-housing protected classes.

Show answer

Race, color, religion, national origin, sex, familial status and disability. Many states and cities add more — check yours.

4. **Medium** In this example, tenants in a Class B area stay 3 years on average and each turnover costs $2,400; rent is $1,800. Find the annual turnover cost as a percent of rent.

Show answer

$\$2{,}400 \div 3 = \$800$; $\$800 \div \$21{,}600 \approx 3.7\%$.

5. **Medium** A renovated, modern house stands on a block of older, poorly kept houses. What are its property class and neighborhood class likely to be, and why does the difference matter?

Show answer

Its property class may be A or B while the neighborhood is C. Rents and resale are limited by the area (the principle of regression), while repairs are lower than the neighbors' — set inputs for both.

6. **Medium** Why should you walk a neighborhood at more than one time of day?

Show answer

Conditions change: morning shows traffic and school activity, evening shows noise, lighting, parking and how the street is cared for, and weekends show the area's everyday use. One noon drive-by misses most of it.

7. **Medium** Rewrite this phrase so it complies with fair-housing advertising rules: "Great for a single Christian man."

Show answer

Remove all references to people: for example, "Studio apartment with private entrance, off-street parking, near bus line." The original states preferences based on religion, sex and familial status.

8. Hard In this example, a $150,000 house rents for $1,550. It passes the 1% rule. List three Class C costs you would check before trusting that screen, with the Deal Analyzer input each affects.

Show answer

Higher vacancy and turnover (Vacancy %), more repairs on an older building (Repairs %), and near-term replacement of roof, furnace or plumbing (CapEx % or upfront repairs); also possibly higher management fees (Management %).

9. Hard A friend uses an unofficial social-media map showing "bad areas" to decide where not to buy. What is wrong with this, and what should he do instead?

Show answer

Unofficial maps can be inaccurate, outdated and based on stereotypes, and steering by them can raise fair-housing concerns. Use official police statistics for specific offenses and periods, compare like with like, and judge property condition, rents and vacancy directly.

10. Hard On a walking survey you count 14 "for rent" signs within four blocks, compared with 3 a year ago. What might this mean, and how would you reflect it in your analysis?

Show answer

Supply is rising or demand is falling — new units, an employer cutting jobs, or rents set too high. Raise the vacancy assumption, check rent comps for falling rents and longer days on market, and stress-test with vacancy +5 points.

11. Challenge In this example, a Class C house with $1,400 rent cash-flows +$50 a month with default assumptions and −$111 with Class C assumptions. What change in monthly rent would bring the Class C version to break-even, roughly? (About 61% of each extra rent dollar reaches cash flow under these assumptions.)

Show answer

Needed: $111 ÷ 0.61 ≈ $182 more rent, about $1,582 — or a lower price. If comps do not support that rent, negotiate the price or walk away.

12. **Challenge** Jane Jacobs judged neighborhoods by watching streets in use. Design a one-page walking checklist with at least eight items, and explain how two of them would change your Deal Analyzer inputs.

Show answer

Sample items: house and yard condition, for-rent signs, vacant buildings, traffic and noise, parking, lighting, distance to transit, grocery and school, construction activity, evening activity. Many for-rent signs raise the vacancy input; poor condition of nearby houses suggests higher repair and CapEx inputs and weaker rent growth.

COMMON MISTAKES

- Describing or classing a neighborhood by the people who live there. Class is shorthand for buildings and economics only.
- Trusting the 1% rule in Class C and D areas without raising vacancy, repairs, CapEx and turnover to fit.
- Using Class A assumptions on an older house because the listing photos look good.
- Judging a neighborhood from one daytime drive instead of walking it at several times.
- Using rumors or unofficial maps for crime instead of official data compared like with like.
- Writing ads about who should live in a home (“perfect for,” “ideal for,” “no children”) instead of describing the home itself.

> **Make it a game · Class Detectives.** Collect twelve real listing photos (exterior only, no people or house numbers) with their price, rent estimate and year built on the back. Players study the front and call out a class — A, B, C or D — with one building-based reason (“original windows,” “new roof,” “yard kept”). Flip the card and check the numbers: price-to-rent and age. A correct class with a good reason scores two points; any reason that mentions people instead of property loses a point.

> **Scripture.** “Devise not evil against thy neighbour, seeing he dwelleth securely by thee.” (Proverbs 3:29, KJV)
>
> Solomon reminds us that the people on any street are neighbors who trust that those around them mean them no harm. An investor who studies a neighborhood must do it as a neighbor — judging buildings and numbers honestly, never scheming against or sorting the people who live there.

2.3 Rent Comps: What Will It Really Rent For?

OBJECTIVES

- Select comparable rentals by bedrooms, bathrooms, size, condition, location and amenities, and distinguish asking rent from actual leased rent.
- Adjust comparable rents for differences such as a garage, laundry, yard, bathrooms and owner-paid utilities, and reconcile a rent estimate.
- Use days on market and season to judge whether a rent is priced right, and compute the cost of overpricing.
- Use HUD Fair Market Rents correctly as a benchmark, knowing they are gross rents at the 40th percentile.
- Verify the rents of an occupied property with leases and a rent roll, and replace a seller's pro forma rent with comps in the Rental worksheet.

> **Warm-up.** Find any two apartments or houses for rent near you on a listing site. In five minutes, write every difference between them you can see — size, bedrooms, parking, laundry, who pays utilities, condition — and guess how many dollars a month each difference is worth to a renter. Which difference do you think matters most?

WATCH

How to Find Rental Comps for Your Investment Property

BiggerPockets · 11:41

https://www.youtube.com/watch?v=a_K_hbZ4mAU

> **WHEN TO WATCH**
> Watch after the fourth core idea. Write her steps for finding rental comps and compare them with the rent-comp grid in Worked Example 1. Skip the software sponsor segments at the beginning and end.

BACKUP VIDEO

How to Run a Rental Comparable Analysis

RentalRookie · 22:21

https://www.youtube.com/watch?v=ttKsydS5YHM

Watch while building your project grid. He fills a rent-comparison spreadsheet on screen; pause and copy his column headings, then add the adjustment columns from this lesson.

KEY TERMS

rent comparable (rent comp)

A similar rental property nearby, recently leased or listed, used to estimate what a subject property will rent for.

subject property

The property being analyzed, whose rent or value is being estimated.

market rent

The rent a property would most probably bring from a typical tenant in the current market, as shown by comparable leases.

asking rent vs. leased rent

The rent advertised in a listing versus the rent a tenant actually agreed to pay; leased rent is the better evidence.

days on market (DOM)

How long a rental listing stays available before leasing; long DOM suggests the asking rent is too high or demand is weak.

rent adjustment

A dollar change to a comparable's rent for a feature it has or lacks compared with the subject: comp better, subtract; comp worse, add.

Fair Market Rent (FMR)

HUD's published estimate of gross rent (shelter plus utilities) at the 40th percentile of standard-quality units for recent movers, by area and bedroom count.

rent roll

A list of a property's units with each tenant's rent, deposit, lease dates and payment status.

pro forma

A seller's or broker's projected income and expenses, often optimistic, which must be verified rather than trusted.

seasonality

The regular change in rental demand through the year; in many markets more tenants move in late spring and summer than in winter.

CORE IDEAS

The story. In April 1940, census takers fanned out across the United States carrying, for the first time, a separate Census of Housing. The country was ten years into the Depression, and Congress wanted to know what had become of the nation's homes. So at every household the enumerator asked not only who lived there but whether the home was owned or rented — and, if rented, the monthly rent — along with questions about the building's condition, plumbing and number of rooms. In a farm field, at a city apartment door, on a mountain porch, the answers went down in pencil: rent, rooms, repair. The Census Bureau later published whole volumes cross-classifying homes by monthly rent and value, by type and age of building and by state of repair. It was, in effect, the first national set of rent comparables: millions of real rents paid by real tenants for homes whose features were recorded beside them. Every rent estimate you make in this course does on one street what the 1940 census did for a nation.

How they figured it out. Knowing typical rents became a working tool of public programs. When Congress created the Section 8 housing assistance program in 1974, the Department of Housing and Urban Development needed a defensible rent for every area, and it began publishing **Fair Market Rents**. Today HUD's FMRs are **gross rents** — shelter rent plus the cost of all utilities except telephone — set at the **40th percentile** of standard-quality units rented by recent movers, a level HUD adopted in 1995; they are published by county or metro area and by number of bedrooms, and HUD also publishes ZIP-code-level Small Area FMRs in some places. Landlords,

appraisers and property managers developed their own method alongside: find recent leases of similar units, adjust for differences the way appraisers adjust sales, and reconcile to one number. FMRs are a useful benchmark; comps are the evidence.

The big idea. A property is worth only what it will rent for, and what it will rent for is shown by **comparable rentals** — similar units, nearby, leased recently. Good comps match the **subject** on bedrooms and bathrooms, size (within about 10–20% in this example), condition and finish, location (same neighborhood, ideally within a mile), property type, and amenities such as parking, laundry and yard, and they show the same arrangement for utilities. The best evidence is **leased rent** — what a tenant actually agreed to pay — rather than **asking rent**; listings that sit for weeks are telling you the asking rent was too high. Three to five good comps, adjusted and reconciled, produce a **market rent** estimate you can defend. One comp is an anecdote. And a seller's **pro forma** rent is a sales pitch until comps confirm it.

Adjust each comp toward the subject: if the comp has something the subject lacks, **subtract** its value from the comp's rent; if the comp lacks something the subject has, **add**. In this example, a garage might be worth $75 a month, an included washer and dryer $40, a second bathroom $75, a fenced yard $25; real values come from pairs of local listings that differ by one feature. **Utilities** need special care: if a comp's rent includes water, sewer and garbage that cost the landlord about $120 a month, subtract that amount to compare with a subject where the tenant pays them — or keep the utilities in your expense inputs. After adjusting, give the most weight to the comps that needed the fewest and smallest adjustments and leased most recently. If adjusted comps spread widely, look for the reason (condition, a busy street) rather than averaging blindly.

Time belongs in the analysis too. **Days on market** tells you about pricing: in this example, a comp that leased in 9 days was priced at or below market; one that took 34 days was priced at the top. **Seasonality** matters in many markets, where more tenants move in late spring and summer than in December, so a winter vacancy may last longer and a summer listing can ask a little more. Overpricing is expensive: in this example, asking $100 a month more than market on a $1,925 rental and sitting three extra weeks costs about $\$1{,}925 \times 12 \div 365 \times 21 \approx \$1{,}329$ of lost rent — more than the $1,200 the higher rent would add in a full year. Use HUD's **FMR** carefully: because it is a gross rent at the 40th percentile, subtract the tenant's typical utilities

before comparing it with a rent where the tenant pays them, and expect a well-kept home to rent somewhat above it.

An occupied property brings its own evidence and its own traps. Ask for the **rent roll** and copies of every **lease**; compare the rents, deposits and dates with bank deposit records, and, for larger properties, ask tenants to sign **estoppel certificates** confirming their rent and deposit. Look for rents far below market (an opportunity, but raises must follow the lease and your state's notice and rent-limit rules — Lesson 2.5), rents far above market (a tenant who may leave), recent move-ins at suspiciously high rents, concessions such as a "free month," and tenants behind on payment. A seller's **pro forma** that says "market rent $2,300" when your comps say $1,925 is not a small error. In this example, on a $240,000 house the pro forma rent shows about +$125 a month of cash flow, while the comp rent shows about −$147. Same house; opposite verdicts.

Run the numbers. Rent is the single most powerful input in the Rental worksheet. Enter your reconciled comp rent — never the seller's figure — in "Monthly rent," put any parking, storage or laundry income in "Other income," and if the landlord will pay water, sewer or garbage, enter that cost in "Owner-paid utilities." Then use the stress test's "Rent 10% lower" row as your answer to the question, "What if my comps are a little high?" Write your comp grid's three best comps on the back of the printed worksheet. The classic mistakes: using asking rents instead of leased rents; using the seller's pro forma or current tenant's inflated rent; comparing a 3-bedroom with 2-bedrooms; ignoring who pays utilities; treating FMR as market rent; and averaging comps without adjusting them.

PICTURE STUDY



1940 Census Enumeration, U.S. Census Bureau, 1940 · Photograph · U.S. Census Bureau

Image: Wikimedia Commons, public domain

The Census Bureau made this photograph during the 1940 count, when enumerators went to every household in the country — including farmers in their fields — to ask the questions of the first Census of Housing. Among them: is this home owned or rented, and if rented, for how much a month? The picture opens this lesson because each answer written in that big portfolio was a rent comparable, recorded beside the features of the home it described.

Look closely

- Look at the size of the enumerator's portfolio. Why would the census use large printed forms with one line per person or household?
- Notice that the farmer has not climbed down from his rake. What does that suggest about how the enumerator fit his questions into people's work?
- Find the farm buildings in the background. What housing facts might the enumerator record about them?
- Compare the two men's clothing and posture. What does each one's job require of him?

Talk about it

1. If you could ask only three questions to estimate what a home would rent for, what would they be, and why?

2. Why is a rent a tenant actually pays better evidence than a rent a landlord hopes to get?
3. The census taker had to record what people told him truthfully, and they had to answer truthfully. How does honesty on both sides make information useful to everyone — in a census, a rent comp or a lease?

PROJECT

The Rent-Comp Grid

You will build a rent-comparison grid for one real listing — a for-sale house or small multifamily you might buy — using at least four comparable rentals from public listing sites. You will adjust each comp for its differences, reconcile a market rent, check it against HUD's Fair Market Rent, and enter it in the Rental worksheet.

Use only public listings. Do not contact landlords or agents.

You will need

- One real for-sale listing (the subject)
- Four to six current or recently leased rentals nearby from public listing sites, with screenshots
- HUD's Fair Market Rent lookup for your county
- A spreadsheet and the Deal Analyzer, Rental worksheet

Steps

1. Record the subject's bedrooms, bathrooms, square feet, parking, laundry, yard, condition and which utilities a tenant would likely pay.
2. Find four to six comps of the same type within about a mile. Record each one's rent, date listed, days on market (or "still listed"), size, features and utilities included.
3. Build a spreadsheet grid: one column per comp, rows for each feature, an adjustment row for each difference, and an adjusted-rent row. State the dollar value you used for each feature and where it came from (a pair of listings that differ by that feature, if you can find one).
4. Reconcile to one market rent, weighting comps with the fewest adjustments and real leasing evidence. Write two sentences explaining your weighting.
5. Look up the FMR for the subject's bedroom count, subtract an estimate of tenant-paid utilities, and compare with your market rent.
6. Enter the market rent in the Rental worksheet with real taxes and insurance; record cash flow, then the "Rent 10% lower" stress-test row.

7. Print the worksheet and grid and write a verdict paragraph — buy, negotiate to a stated price, or walk away — that names your rent and its evidence. File it in the deal binder.

INVESTOR'S NOTEBOOK

1. Flashcards: rent comp, subject, market rent, asking vs. leased rent, days on market, FMR, rent roll, pro forma, estoppel certificate.
2. Draw a blank rent-comp grid with rows for beds, baths, size, parking, laundry, yard, utilities, condition, DOM and adjusted rent; copy it for future deals.
3. Trap list "Rent comps": ending with — Comp better, subtract; comp worse, add; and never trust a pro forma.

KEY FORMULAS

$$\text{Adjusted comp rent} = \text{comp rent} - \text{value of features the comp has and the subject lacks} + \text{value of features the subject has and the comp lacks}$$

$$\text{Daily rent} = \frac{\text{monthly rent} \times 12}{365}$$

$$\text{Cost of extra vacancy} = \text{daily rent} \times \text{extra days vacant}$$

$$\text{FMR shelter equivalent} \approx \text{FMR (gross)} - \text{typical tenant-paid utilities}$$

From history. By law, individual census records are kept confidential for 72 years. On April 2, 2012, the National Archives released the 1940 census, and millions of Americans looked up their parents and grandparents for the first time — including the monthly rent or home value written beside their family's names. A student today can often find a grandparent's 1940 address, rent and number of rooms and compare them with rents on the same street now.

Example 1. In this example, the subject is a 3-bedroom, 2-bath house of 1,250 square feet with no garage, washer-dryer hookups (no machines) and all utilities paid by the tenant. Comp 1: 3/2, 1,300 sq ft, one-car garage, washer and dryer included, leased at $2,050 in 12 days. Comp 2: 3/1, 1,150 sq ft, no garage, hookups, leased at $1,850 in 34 days. Comp 3: 3/2, 1,275 sq ft, no garage, hookups, landlord pays water, sewer and garbage (about $120), leased at $2,050 in 9 days. Use garage $75, washer-dryer $40, second bath $75; ignore size differences under 10%.

Show solution

1. Comp 1 is better (garage, machines): $\$2{,}050 - \$75 - \$40 = \$1{,}935$.
2. Comp 2 is worse (one bath): $\$1{,}850 + \$75 = \$1{,}925$; its 34 days on market show it was priced at the top.
3. Comp 3 includes utilities the subject's tenant pays: $\$2{,}050 - \$120 = \$1{,}930$; it needed one adjustment and leased fastest.
4. Reconcile: the adjusted rents cluster at $1,925–$1,935; weight Comp 3 most.

Answer: Market rent about $1,925 a month. Enter $1,925 as "Monthly rent" in the Rental worksheet, with owner-paid utilities at zero.

Example 2. In this example, the seller's pro forma for a $240,000 house claims market rent of $2,300; your comps support $1,925. Taxes are $2,900, insurance $1,250, closing $7,200, and the other inputs are the Rental worksheet defaults. Compare the two analyses.

Show solution

1. Annual rent difference: $(\$2{,}300 - \$1{,}925) \times 12 = \$4{,}500$ of scheduled income.
2. Rental worksheet with $2,300: NOI about $15,871; cash flow about $+\$125$ a month; DSCR 1.10.
3. With $1,925: NOI about $12,607; cash flow about $-\$147$ a month; DSCR 0.88.
4. NOI falls by about $3,264 — less than $4,500 because vacancy, repairs, CapEx and management also shrink with lower rent.

Answer: The pro forma makes a money-losing house look profitable. Use the comp rent; then the honest verdict is to negotiate the price down substantially or walk away.

Example 3. In this example, market rent is $1,925. An owner lists at $2,025 and the unit sits 21 days longer than it would have at market rent. Compare the lost rent with the extra rent collected over a 12-month lease.

Show solution

1. Daily rent: $\$1{,}925 \times 12 \div 365 \approx \$63.29$.
2. Lost rent: $\$63.29 \times 21 \approx \$1{,}329$.
3. Extra rent over a year: $\$100 \times 12 = \$1{,}200$.

Answer: Overpricing loses about $129 in the first year — and a higher rent can mean fewer applicants and a shorter tenancy. Price at market and fill the unit quickly.

PRACTICE

1. Easy What is the difference between asking rent and leased rent, and which is better evidence?

   Show answer

   Asking rent is the advertised price; leased rent is what a tenant actually agreed to pay. Leased rent is better evidence of market rent.

2. **Easy** A comp has a garage and the subject does not. Do you add to or subtract from the comp's rent?

   Show answer

   Subtract: the comp is better, so its rent is higher than the subject's would be.

3. **Easy** What two things make HUD's Fair Market Rent different from a typical market rent you would enter in the Rental worksheet?

   Show answer

   FMR is a gross rent that includes utilities (except telephone), and it is set at the 40th percentile of standard-quality units, not the middle of the market.

4. **Medium** In this example, a comp leased for $1,700 with water, sewer and garbage included (about $110 a month). The subject's tenant would pay those. What is the comp's adjusted rent?

   Show answer

   $\$1{,}700 - \$110 = \$1{,}590$.

5. **Medium** In this example, a subject has 2 bathrooms and a fenced yard. A comp with 1 bathroom and no yard leased for $1,600. Using $75 for a bath and $25 for a yard, find the adjusted rent.

   Show answer

   The comp is worse in both: $\$1{,}600 + \$75 + \$25 = \$1{,}700$.

6. **Medium** In this example, the 3-bedroom FMR is $2,040 and tenant-paid utilities average $190. What is the FMR's shelter equivalent, and how should a well-kept house's market rent compare?

   Show answer

   $\$2{,}040 - \$190 = \$1{,}850$. Because FMR sits at the 40th percentile, a well-kept house may reasonably rent somewhat above that — but only comps can say how much.

7. Medium Three comps adjust to $1,480, $1,520 and $1,760. What should you do before reconciling?

Show answer

Investigate the outlier at $1,760: it may be renovated, furnished, on a better street or still unleased at an asking rent. If it is not truly comparable, drop it or adjust further rather than averaging it in.

8. Hard In this example, market rent is $2,200. An owner asks $2,350 and the unit sits 30 extra days. Compare lost rent with the extra rent over a 12-month lease.

Show answer

Daily rent $\$2{,}200 \times 12 \div 365 \approx \$72.33$; lost $\approx \$2{,}170$. Extra over a year $\$150 \times 12 = \$1{,}800$. Overpricing costs about $370.

9. Hard A seller's rent roll shows a tenant who moved in last month paying $2,400 , while comps support $2,000. What might explain it, and what would you ask to see?

Show answer

Possible concessions (a free month), a relative or friend paying above market to support a sale price, or a mistake. Ask for the lease, the bank deposits for the past months, any concession or side agreement, and a signed tenant estoppel certificate; analyze at the comp rent.

10. Hard In this example, a duplex's current tenants pay $1,100 each while comps support $1,350. What should you enter in the Rental worksheet, and what must you check before assuming the higher rent?

Show answer

Analyze first at the actual $2,200 total, then separately at market. Check the leases' end dates and your state's rent-increase notice and limit rules (Lesson 2.5); raising rents takes time and may cause turnover costs.

11. **Challenge** In this example, an investor's comps support $1,800, but she enters the seller's $2,000. Under Rental worksheet default percentages (6% vacancy, 6% repairs, 7% CapEx, 9% management of collected rent), about how much does her NOI overstate the truth?

    Show answer

    Each rent dollar adds about $0.94 - 0.13 - 0.0846 \approx 0.725$ of NOI. $\$200 \times 12 \times 0.725 \approx \$1{,}741$ a year of overstated NOI.

12. **Challenge** Explain why one comp is "an anecdote" and how you would decide how many comps are enough.

    Show answer

    One lease may reflect a special situation — a fast-moving landlord, an unusual tenant, a concession. Enough comps is when three to five similar, recent leases, after adjustment, cluster within a narrow range and you can explain any outlier; if they still spread widely, widen the search or treat the estimate as uncertain and stress-test it.

COMMON MISTAKES

- Using asking rents of listings that never leased instead of leased rents.
- Trusting a seller's pro forma or an above-market current lease instead of comps.
- Comparing different unit types — a 2-bedroom with a 3-bedroom, an apartment with a house — without adjusting.
- Ignoring who pays utilities. A rent that includes water and sewer is not comparable to one that does not.
- Treating HUD's Fair Market Rent as market rent. It is a gross rent at the 40th percentile, useful only as a benchmark.
- Overpricing to "test the market." Extra vacancy days often cost more than the extra rent earns.

> **Make it a game · Rent Duel.** A parent chooses ten real rental listings and hides the rents. Each player gets a card with the subject home's features. For each listing shown, players write the adjustments ("garage −$75, utilities included −$120") and their estimate of what the subject would rent for, then the parent reveals the listing's rent. Closest adjusted estimate wins a point; an estimate with the adjustment in the wrong direction loses one. After ten listings, the winner reconciles a final rent and defends it in one sentence.

> **Scripture.** “The simple believeth every word: but the prudent man looketh well to his going.” (Proverbs 14:15, KJV)
>
> A pro forma, a listing and a seller’s promise are words. The prudent investor checks them against leases, deposits and real comparables before taking a step — and is just as careful to price his own rentals honestly when he advertises them.

2.4 Sale Comps and After-Repair Value

OBJECTIVES

- Select sold comparables for a subject property by recency, proximity, size, type, age and condition class, and explain why listings are not sales.
- Adjust sold comps for time, size and features using comp better, subtract; comp worse, add — and reconcile them into a value estimate.
- Estimate after-repair value (ARV) from renovated comps and show how ARV errors change a flip's maximum offer and a BRRRR's refinance.
- Use price per square foot as a check while explaining its limits.
- Distinguish a CMA, a broker price opinion and an appraisal, and describe how investors find sale prices in non-disclosure states such as Idaho.

> **Warm-up.** Two houses on the same street sold last month: one for $310,000, one for $365,000. In five minutes, list every reason you can think of that might explain the $55,000 difference. Then decide: if a third house on the street needs a new kitchen, which sale tells you more about what it will be worth after the work is done?

WATCH

How to Run Comps on a House (Value ANY Property)

BiggerPockets · 12:41

https://www.youtube.com/watch?v=zEXQ7uaiGfA

> **WHEN TO WATCH**
> Watch after the fourth core idea. He gives rules for choosing comps — same subdivision, similar size, same type and age, recent sales; write each rule and the number he attaches to it, then check them against Worked Example 1.

BACKUP VIDEO

How to Estimate ARV (After Repair Value) in 3 Steps

Real Estate Rookie · 11:08

https://www.youtube.com/watch?v=0mQgtO9JdnM

Watch before the project. Copy his three steps for estimating ARV and use them, with this lesson's adjustment grid, on your own subject property.

KEY TERMS

sales comparison approach

Estimating value from recent sales of similar properties, adjusted for their differences from the subject.

after-repair value (ARV)

The estimated market value of a property after planned repairs, supported by sales of comparable renovated homes.

adjustment

A dollar change to a comp's sale price for a difference from the subject: comp better, subtract; comp worse, add.

reconciliation

Weighing adjusted comps — favoring those with the fewest and smallest adjustments — to reach one value estimate.

comparative market analysis (CMA)

A real estate agent's estimate of a property's likely price from comparable sales; not an appraisal.

non-disclosure state

A state where sale prices are not required to be reported in the public record, so investors rely on the MLS, assessors and appraisers.

sold comparable (sale comp)

A similar property that has closed its sale recently; the price actually paid is the evidence, unlike a listing's asking price.

condition class

A grouping of comps by condition — dated, average, or fully renovated — so that a renovated subject is compared with renovated sales.

time (market conditions) adjustment

An adjustment for price changes in the market between a comp's sale date and today.

price per square foot

Sale price divided by finished living area; a useful check that misleads when sizes, features or condition differ.

appraisal

A licensed or certified appraiser's written opinion of value, prepared under professional standards (USPAP), usually ordered by a lender.

CORE IDEAS

The story. In 1987 two economists, Karl Case of Wellesley College and Robert Shiller of Yale, published new indexes of single-family home prices for Atlanta, Chicago, Dallas and San Francisco from 1970 onward, built from nearly a million home sales. They had noticed a problem with the usual measure, the average or median sale price. If more large, expensive houses happen to sell one quarter, the average price rises even if no house is worth a dollar more; if many small houses sell the next, it falls. So Case and Shiller compared each house only with itself — using homes that had sold more than once and measuring the change between the two sales. They called it the weighted repeat-sales method, and it became the basis of the home-price index that still carries their names. They also reported something every investor should remember: individual home prices are so "noisy" compared with city-wide trends that forecasting the price of any one house is difficult. Good valuation, they showed, begins by comparing like with like.

How they figured it out. Appraisers had long faced the same problem house by house, and their answer is the **sales comparison approach**. Rather than average different houses, the appraiser chooses a few **sold comparables** as much like the subject as possible and adjusts each one for its differences: if the comp has something the subject lacks, subtract its value from the comp's price; if the comp lacks something the subject has, add. A **time adjustment** brings older sales up or down to today's market. Then the appraiser **reconciles**, giving the most weight to the comps that needed the fewest and smallest adjustments. Lenders made the method standard on their appraisal forms, and investors adapted it for one special question: not "What is this house worth today?" but "What will it be worth after I fix it?" That number is the **after-repair value**, and every BRRRR and flip depends on it.

The big idea. ARV is estimated from recent **sold** comps that are already in the condition the subject will be in after repairs — the same **condition class**. Listings are not evidence of value; they are asking prices, and a listing that has sat for months is evidence that its price is too high. In this example, good comps are sales within the last three to six months, within about half a mile to a mile (ideally the same subdivision), of the same property type and similar age, within about 200 square feet of the subject's size, with similar bedrooms, bathrooms, garage and lot. Use at least three; adjust each for time, size and features; and reconcile to one number. A renovated subject compared with dated comps will be undervalued; a dated subject

compared with renovated comps — the seller's favorite trick — will be overvalued. The investor's ARV must be the number an appraiser and a buyer will actually reach, not the number the deal needs.

Adjustments should come from the market, not from cost. In this example, the market has been rising about 0.5% a month, a second garage stall is worth about $10,000, a half bath about $7,500, and extra living area about $100 a square foot — less than the average price per square foot, because added space adds less than the first square feet of a house do. A busy street might cost $10,000 against a quiet one. Each figure is best supported by **paired sales**: two similar sales that differ mainly by that one feature. Keep the arithmetic honest by computing each comp's **gross adjustment** — the sum of all adjustments regardless of sign — as a percent of its price. In this example, comps with gross adjustments of 3–6% are strong; a comp needing 20% or more is probably not comparable. Always note the condition of each comp from its listing photos and remarks: "fully remodeled," "original kitchen" and "investor special" are three different markets.

Price per square foot is the shortcut everyone uses and the one that misleads most often. Dividing each sale price by its living area and multiplying the average by the subject's size is a fast check, and it works when sizes, ages and condition are similar. But smaller houses usually sell for more per square foot than larger ones, finished basements and garages are not counted the same way everywhere, and a renovated kitchen does not show up in square feet at all. In this example, three renovated comps average about $255.67 a square foot, suggesting $357,939 for a 1,400-square-foot subject — about $9,500 below the adjusted grid, because the shortcut ignores time and features. Applied to a 900-square-foot cottage, the same figure suggests about $230,100, though small homes nearby may sell at a much higher rate. Use price per square foot to catch mistakes, never to set ARV alone.

Know who produces which number. A **CMA** is an agent's analysis of comparable sales, prepared to price a listing or guide an offer; a **broker price opinion** is a similar estimate for a lender or owner. An **appraisal** is a licensed or certified appraiser's opinion under professional standards, usually ordered by the lender, and it decides how much a refinance or a buyer's loan can be. An investor's ARV is a private estimate that must predict both the appraisal and the market. In most states sale prices are public record, often on the county assessor's or recorder's website. In **non-disclosure states** they are not: Idaho, for example, is one of about ten states with no

obligation to publicly disclose a sale price, and Montana is commonly listed too — check your own state. There, investors get sold data through an agent's access to the MLS, through assessor information where it is shared, and from appraisers and title companies.

Run the numbers. ARV is the most important input in the BRRRR and Fix & flip worksheets. In the BRRRR worksheet it sets the refinance loan (ARV × refinance LTV) and therefore how much cash stays in the deal; in the Fix & flip worksheet it sets the sale price, the selling costs and the 70% rule maximum offer. Every $10,000 of ARV error moves the 70% maximum offer by $7,000 and a 75%-LTV refinance by $7,500. A careful investor attaches the comp grid to the printed worksheet, runs the deal again at ARV minus 5% and minus 10%, and buys only if the lower ARV still works. The classic mistakes: using listings instead of sales; comparing a renovated subject with dated comps or the reverse; relying on price per square foot alone; using comps from a better neighborhood across a major road; ignoring time; and choosing the one high comp that makes the deal work.

PICTURE STUDY



Street Corner and Residences in the Mount Baker Neighborhood, Seattle, Unknown photographer, Probably 1909–1910 · Photograph · University of Washington Libraries, Special Collections (Seattle Photographs)

Image: Wikimedia Commons, public domain

An unknown photographer recorded this corner of Seattle's Mount Baker neighborhood around 1909 or 1910, when builders were filling new streets with houses of similar plan and size. The picture survives in the University of Washington's collection of Seattle photographs. It opens this lesson because it is a ready-made comp grid: houses of nearly the same age, style and size, side by side, differing only in small features — a porch, a window, a dormer — exactly the kind of differences an appraiser adjusts for.

Look closely

- Compare the houses in the row. List three ways they are alike and two ways they differ.
- Look at the apartment building at the end of the row. Would it be a good comparable for one of the houses? Why or why not?
- Find the streetcar tracks. How might being on a transit line affect these houses' value compared with houses a few blocks away?
- Notice the steps and raised lots. What features of a lot, not the house, might an appraiser adjust for?

Talk about it

1. If one of these houses sold for more than its twins, what features would you check first to explain the difference?
2. Why would a sale on this block be a better comp for its neighbors than a sale of a larger house across a busy road?
3. Proverbs says a just weight is the Lord's delight. How can an investor be tempted to use a "false balance" when choosing comps — and what does a just weight look like in an ARV?

PROJECT

The ARV Grid

You will choose a real listing that needs work — look for words such as “dated,” “original” or “needs TLC” — and estimate what it would be worth fully renovated, using at least three sold comps of renovated homes. You will build an adjustment grid, reconcile an ARV, check it with price per square foot, and see how it drives the Fix & flip and BRRRR worksheets.

Use public sold data from your county or listing sites. In a non-disclosure state, explain how you found sale prices and how reliable they are. Do not contact agents or sellers.

You will need

- One real listing of a home needing renovation (the subject), with photos
- Three to five sold comps of renovated homes nearby, with sale dates, prices, sizes and photos
- A spreadsheet for the grid
- The Deal Analyzer: Fix & flip and BRRRR worksheets

Steps

1. Describe the subject as it will be after repairs: beds, baths, square feet, garage, lot, and the finishes you plan.
2. Find three to five renovated sales from the last six months, near the subject and within about 200 square feet of its size. Record each comp’s price, date, size, features and condition notes.
3. Estimate a monthly market change from your county’s or a public price index’s recent trend, and choose adjustment values for size and each feature, citing paired sales if you can find them.
4. Build the grid: time, size and feature adjustments, adjusted price and gross adjustment percent for each comp. Reconcile to one ARV with stated weights.
5. Check with price per square foot and explain any difference of more than 5%.

6. Enter the ARV, the list price and a rough rehab budget in the Fix & flip worksheet; record profit and the 70% rule maximum offer. Enter the same in the BRRRR worksheet; record cash left in after refinance. Repeat both at ARV −10%.
7. Print both worksheets with the grid and write a verdict paragraph — buy, negotiate to a stated price, or walk away. File it in the deal binder.

INVESTOR'S NOTEBOOK

1. Flashcards: sales comparison approach, sold comp, ARV, condition class, time adjustment, gross adjustment, reconciliation, CMA, appraisal, non-disclosure state.
2. Draw a blank ARV grid with rows for sale price, date, time, size, beds, baths, garage, location, condition, adjusted price and gross adjustment percent.
3. Trap list "ARV": ending with — Sold, not listed; renovated against renovated; comp better, subtract.

KEY FORMULAS

$$\text{Adjusted comp price} = \text{sale price} \pm \text{time adjustment} \pm \text{feature adjustments}$$

$$\text{Time adjustment} = \text{sale price} \times \text{monthly market change} \times \text{months since sale}$$

$$\text{Gross adjustment } \% = \frac{\sum |\text{adjustments}|}{\text{sale price}}$$

$$\text{ARV} = \sum(\text{weight}_i \times \text{adjusted price}_i), \quad \sum \text{weight}_i = 1$$

$$\text{Price per sq ft} = \frac{\text{sale price}}{\text{living area}}$$

$$70\% \text{ rule maximum offer} = \text{ARV} \times 0.70 - \text{rehab}$$

From history. The repeat-sales idea that Case and Shiller refined had an earlier start: economists had proposed in the early 1960s that the best way to measure price change was to follow the same houses through repeated sales. Case and Shiller's weighted version, and the indexes built on it, are now published monthly for the nation and for twenty large metro areas, including Seattle and Portland, and are among the most watched measures of American home prices.

Example 1. In this example, the subject after renovation will be a 3-bedroom, 2-bath, 1,400-square-foot house with a one-car garage on a quiet street. Prices are rising 0.5% a month. Comp 1: sold 2 months ago for $372,000, 1,480 sq ft, 3/2, two-car garage. Comp 2: sold 4 months ago for $349,000, 1,350 sq ft, 3/1.5, one-car garage. Comp 3: sold 1 month ago for $360,000, 1,400 sq ft, 3/2, one-car garage, on a busy street. All three are fully renovated. Use $100 per square foot, $10,000 for a garage stall, $7,500 for a half bath and $10,000 for the busy street. Estimate ARV.

Show solution

1. Comp 1: time $+\$3{,}720$ (1%); size $-80 \times \$100 = -\$8{,}000$; extra stall $-\$10{,}000$; adjusted $\$357{,}720$; gross adjustment $\$21{,}720$ (5.8%).
2. Comp 2: time $+\$6{,}980$ (2%); half bath $+\$7{,}500$; size $+50 \times \$100 = +\$5{,}000$; adjusted $\$368{,}480$; gross 5.6%.
3. Comp 3: time $+\$1{,}800$ (0.5%); busy street $+\$10{,}000$; adjusted $\$371{,}800$; gross 3.3%.
4. Reconcile with weights 25%, 25%, 50% (Comp 3 needed the least adjustment): $0.25(\$357{,}720) + 0.25(\$368{,}480) + 0.50(\$371{,}800) = \$367{,}450$.

Answer: ARV about $367,000. Enter it as the after-repair value in the BRRRR or Fix & flip worksheet, then rerun at $349,000 (−5%) and $330,000 (−10%).

Example 2. Check the ARV in Worked Example 1 with price per square foot, and then apply the same average to a 900-square-foot cottage nearby.

Show solution

1. Comp 1: $\$372{,}000 \div 1{,}480 \approx \$251.35$. Comp 2: $\$349{,}000 \div 1{,}350 \approx \$258.52$. Comp 3: $\$360{,}000 \div 1{,}400 \approx \$257.14$.
2. Average: $\approx \$255.67$; times 1,400 sq ft $\approx \$357{,}939$.
3. Difference from the grid: $\$367{,}450 - \$357{,}939 \approx \$9{,}500$ — the shortcut ignored rising prices and the features.
4. Cottage: $900 \times \$255.67 \approx \$230{,}103$, likely too low, since small houses usually sell for more per square foot.

Answer: Price per square foot came within about 2.6% for the similar-size subject but cannot be trusted for a house of a very different size. Use it as a check, not a method.

Example 3. In this example, the planned rehab is $60,000. Using the ARV of $367,000, find the 70% rule maximum offer and the BRRRR refinance loan at 75% LTV. Then suppose the appraiser concludes $345,000 and the true market for a flip is 10% below your ARV.

Show solution

1. 70% rule at your ARV: $\$367{,}000 \times 0.70 - \$60{,}000 = \$196{,}900$.
2. At ARV 10% lower ($330,300): $\$330{,}300 \times 0.70 - \$60{,}000 = \$171{,}210$ — about $25,690 lower.
3. Refinance at your ARV: $\$367{,}000 \times 0.75 = \$275{,}250$.
4. Refinance at the appraisal: $\$345{,}000 \times 0.75 = \$258{,}750$; $16,500 more cash stays in the deal.

Answer: An optimistic ARV leads to an offer about $25,700 too high for a flip, and a $22,000 low appraisal traps $16,500 in a BRRRR. Conservative ARVs protect the investor.

PRACTICE

1. Easy Why are active listings poor evidence of value?

Show answer

They are asking prices, not prices actually paid; many listings sell for less or not at all. Sold comps show what buyers really paid.

2. Easy A comp has a third bedroom the subject lacks. Do you add to or subtract from the comp's price?

Show answer

Subtract: the comp is better, so its price is higher than the subject's would be.

3. Easy What is the difference between a CMA and an appraisal?

Show answer

A CMA is an agent's estimate from comparable sales to guide pricing; an appraisal is a licensed or certified appraiser's opinion of value under professional standards, usually ordered by a lender.

4. Medium In this example, a comp sold 3 months ago for $300,000 in a market rising 0.4% a month. What is its time adjustment?

Show answer

$\$300{,}000 \times 0.004 \times 3 = +\$3{,}600$, so $303,600 before other adjustments.

5. Medium In this example, a comp sold for $280,000 with 1,500 sq ft; the subject has 1,380 sq ft. Using $90 per square foot for size, find the size adjustment and adjusted price.

Show answer

The comp is 120 sq ft larger: $-120 \times \$90 = -\$10{,}800$; adjusted $269,200.

6. Medium In this example, a comp's adjustments are $+\$4{,}000$, $-\$12{,}000$ and $+\$6{,}000$ on a $320,000 sale. Find the net and gross adjustments.

Show answer

Net $-\$2{,}000$; gross $22,000, or about 6.9% of the sale price. The gross figure measures how comparable the sale really is.

7. Medium A seller's flyer says, "Renovated homes nearby sold for $410,000!" The house for sale has its original 1970s kitchen and baths. What is wrong with using those sales to value it as it stands?

Show answer

They are in a different condition class. They show possible ARV after repairs, not today's value; the as-is value must come from sales of similar unrenovated homes, and the gap must cover rehab, holding, selling costs and profit.

8. Hard In this example, three adjusted comps are $298,000 (gross adjustments 4%), $305,000 (7%) and $330,000 (22%). Reconcile an ARV and explain your weights.

Show answer

Give most weight to the first two, for example 55% and 40%, and little or none to the third (5%) because its 22% gross adjustment shows it is not truly comparable: $0.55(\$298{,}000) + 0.40(\$305{,}000) + 0.05(\$330{,}000) = \$302{,}400$; call it about $302,000.

9. Hard In this example, an investor's ARV is $300,000 and the rehab is $45,000. If the true ARV is $280,000, how much too high is her 70% rule offer?

Show answer

Her offer: $\$300{,}000 \times 0.70 - \$45{,}000 = \$165{,}000$. At the true ARV: $151,000. She is $14,000 too high — 70% of the $20,000 ARV error.

10. Hard You are investing in Idaho, where sale prices are not required to be publicly disclosed. Name three ways to find sold-price evidence for your comps.

Show answer

An agent's MLS access to closed sales; county assessor information where it is shared; and appraisers or title companies with local sales data. Note the source and reliability of each price.

11. **Challenge** In this example, renovated comps of 1,300–1,500 sq ft average $240 per square foot. A 2,400-square-foot renovated house nearby sold for $468,000. Find its price per square foot and explain the difference.

    Show answer

    $468,000 \div 2,400 = \$195$ per square foot. Larger homes usually sell for less per square foot because land, kitchen and baths are spread over more area; this is why price per square foot misleads across sizes.

12. **Challenge** Case and Shiller found that individual home prices are "noisy" compared with city-wide trends. What does that mean for an investor estimating ARV, and how should she protect herself?

    Show answer

    Any single house can sell well above or below what comps predict, so an ARV is an estimate with a range, not a fact. She should use several close comps, prefer those with small adjustments, and require the deal to work at ARV −5% to −10%.

COMMON MISTAKES

- Using active listings or pending prices as if they were sales.
- Comparing a renovated subject with dated comps, or a dated subject with renovated comps.
- Relying on average price per square foot without adjusting for size, features, condition and time.
- Reaching across a major road, school boundary or neighborhood edge for higher comps.
- Picking the one high comp that makes the deal work instead of reconciling honestly.
- Assuming the appraiser will agree with your ARV. A low appraisal leaves cash in a BRRRR and a flip may sell for less.

Make it a game · Comp Better, Subtract. The parent prepares eight comp cards for one pretend subject house, each with a sale price and one or two differences ("two-car garage," "sold 6 months ago," "no second bath"). Players race to write the adjustment direction and amount for each card using a posted price list, then the adjusted price. Each correct direction scores one point and each correct adjusted price two more. After eight cards, everyone reconciles an ARV with weights; the closest to the parent's answer key wins the round.

Scripture. "A false balance is abomination to the LORD: but a just weight is his delight." (Proverbs 11:1, KJV)

A merchant who weighs with a false balance cheats by measurement. An investor can do the same with comps — choosing the high sale, ignoring the weak one, comparing renovated against dated. A just weight in valuation means honest comps, honest adjustments and an ARV you would defend to the buyer you will one day sell to.

2.5 Landlord–Tenant Law Differs by State

OBJECTIVES

- List the subjects state landlord–tenant law governs — deposits, entry, notices, rent increases, habitability, termination and eviction — and explain why the investor must check state and city law for each.
- State, as of 2026 and from the official statutes, Oregon's and Washington's rules on rent-increase notice and annual limits, deposit-return deadlines, entry notice and notice for nonpayment, and compare them with Idaho's deposit rule.
- Compute a maximum lawful rent increase and a deposit-accounting deadline under a stated statute.
- Find and read your own state's landlord–tenant statute on the legislature's website, and describe the Uniform Residential Landlord and Tenant Act as a model.
- Build the cost of compliance — rent limits, notice periods, relocation payments and eviction time — into the Deal Analyzer inputs.

> **Warm-up.** Suppose you rent a room from a neighbor. In five minutes, write five rules you think the law should set for both of you — about money, repairs, privacy and leaving. Then circle the rules you think would be the same in every state, and put a box around those you suspect differ from state to state.

WATCH

Exemptions & Required Notice: Residential Landlord-Tenant Act Changes: Part 2: Legal Hotline 2025

Washington REALTORS · 11:57

https://www.youtube.com/watch?v=_jg3UvPmonA

> **WHEN TO WATCH**
> Watch after the fifth core idea. Washington lawyers explain the 2025 rent-increase law's exemptions and notice rules; list each exemption they name and check it against the statute summary in this lesson. Treat it as mechanics, not opinion.

BACKUP VIDEO

Landlord/Tenant Law: Part 1 (Property) - Listen & Learn

Law School Toolbox · 15:08

https://www.youtube.com/watch?v=NFF41dOXO40

Watch before the practice set for the general legal framework: write the four kinds of leasehold estates and the landlord's and tenant's basic duties she describes, then note which ones your state's statute changes.

KEY TERMS

landlord–tenant act

A state statute governing residential rentals: deposits, rent, notices, entry, repairs, termination and eviction.

habitability

The landlord's legal duty to keep a rental fit to live in — weatherproof, with working plumbing, heat, safe wiring and other essentials listed by statute or code.

Uniform Residential Landlord and Tenant Act (URLTA)

A model statute published in 1972 by the Uniform Law Commission (revised 2015) on which many states based their landlord–tenant laws.

security deposit

Money a tenant pays to secure performance of the lease, returned at move-out minus lawful deductions; state law sets the rules and deadlines.

normal (ordinary) wear and tear

Deterioration from ordinary, careful use over time, which a landlord may not charge against a deposit.

notice of entry

Advance notice a landlord must give before entering a tenant's unit except in emergencies; the required time is set by state law.

rent-increase notice

The written advance notice a landlord must give before rent rises; the period and any limits are set by state law.

rent stabilization (annual increase limit)

A statewide or local limit on how much rent may be raised in a period, often a fixed percent plus inflation with a cap.

just cause (for-cause) termination

A rule allowing a landlord to end certain tenancies only for reasons listed in the law, rather than without stating a reason.

unlawful detainer (eviction)

The court process by which a landlord lawfully recovers possession after proper notice; self-help such as lockouts or shutting off utilities is not allowed.

certificate of occupancy

The local government's document approving a new building for use; its date determines the new-construction exemptions in Oregon's and Washington's rent limits.

CORE IDEAS

The story. In 1890 a New York reporter named Jacob Riis published *How the Other Half Lives*, with drawings and photographs of the city's tenements: dark rooms without windows, rear buildings crowded behind front ones, a few shared privies in a yard for many families. A decade later a young reformer, Lawrence Veiller, organized a Tenement House Exhibition of maps, photographs and models of real blocks, and thousands came to see it. Veiller became secretary of a state Tenement House Commission, and in 1901 New York passed the Tenement House Act he helped draft: tenements built after April 12, 1901, had to meet new standards for light and air, including a separate water closet inside each apartment, and the city soon set up a department to enforce them. Owners grumbled about the cost; within a generation

the rules were simply how housing was built. The lesson for an investor is practical: the law decides what a rental must be, and those rules differ by place and change over time.

How they figured it out. For much of American history a residential lease was treated mainly as a transfer of land: the tenant took the property as it was, and the landlord had few duties. As more families rented homes they could not repair themselves, lawmakers began treating a home lease as a contract with duties on both sides. In 1972 the Uniform Law Commission published the **Uniform Residential Landlord and Tenant Act (URLTA)**, a model statute setting out the landlord's duty to keep the premises fit to live in, rules for deposits and entry, and the tenant's duties to pay, care for the unit and give notice. The Commission counts 21 states that adopted the 1972 act, and it published a revised version in 2015. Washington enacted its Residential Landlord-Tenant Act in 1973, now RCW chapter 59.18; Oregon's Residential Landlord and Tenant Act is ORS chapter 90. Each state amends its own act, often every session.

The big idea. Landlord–tenant law is **state law**, sometimes with city rules added, and an investor must know it before buying because it shapes both duties and numbers. Every act answers the same questions: How large may a **security deposit** be, and how soon must it be accounted for? How much **notice** is required before **entering**, **raising rent** or **ending a tenancy** — and are increases **limited**? What keeps a unit **habitable**? Must a landlord have a listed reason to end a tenancy (**just cause**)? How does **eviction** work and how long does it take? The answers differ sharply by state. Two things do not: the federal Fair Housing Act applies everywhere, and everywhere eviction is a court process — never lockouts, removing belongings or shutting off utilities. This lesson teaches the rules as mechanics: what they require and how to comply.

Oregon, as of 2026 (ORS chapter 90). Rent (ORS 90.323–.324): except in week-to-week tenancies, no increase in the first year, at least **90 days' written notice**, no more than one increase in 12 months, and no more than the lesser of 10% or 7% plus CPI as published each September by the Department of Administrative Services — **9.5% for 2026**, 10% for 2027. Units whose first certificate of occupancy is less than 15 years old at the notice, and certain regulated affordable housing, are exempt from the percentage limit. Termination (ORS 90.427): after the first year of occupancy, a month-to-month tenancy may be ended only for tenant cause or a listed landlord

reason — demolition, major repairs, the landlord or immediate family moving in, or a sale to a buyer who will live there — generally with 90 days' notice and a payment of one month's rent, which owners of four or fewer units do not owe; owner-occupied buildings of no more than two units have separate rules. Deposits (ORS 90.300): a written accounting within **31 days** after the tenancy ends and possession is returned, with no charge for ordinary wear and tear. Entry (ORS 90.322): at least **24 hours'** actual notice except in emergencies. Nonpayment (ORS 90.394): a 10-day notice given no sooner than the eighth day of the rental period, or a 13-day notice no sooner than the fifth.

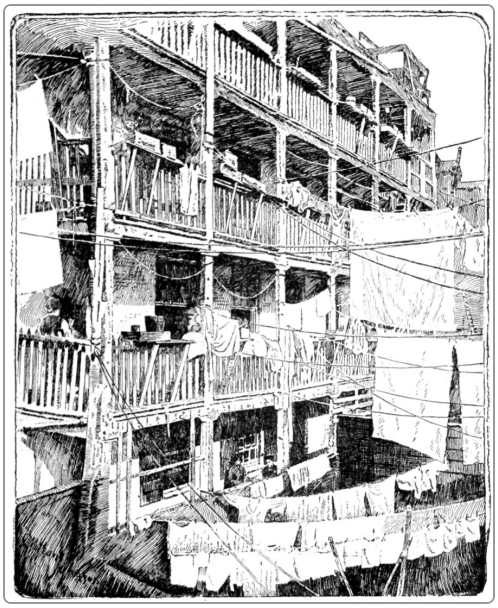
Washington, as of 2026 (RCW chapter 59.18). Rent (RCW 59.18.140, .700–.710, enacted 2025): at least **90 days' written notice**, no increase in the first 12 months of a tenancy, and no increase in any 12 months above 7% plus CPI or 10%, whichever is less, as published by the Department of Commerce — **9.683% for 2026**, 10% for 2027. Exempt from the limit: units whose first certificate of occupancy was issued 12 or fewer years before the notice; a duplex, triplex or fourplex whose owner lived in a unit when the tenancy began and still does; an owner-occupied single-family home renting no more than two units or bedrooms, including an ADU; and certain public and nonprofit affordable housing. The owner-occupied exemptions do not apply to REITs, corporations or LLCs with a corporate member, and the limit expires July 1, 2040. Termination (RCW 59.18.650): no eviction, refusal to continue or ending of a periodic tenancy except for listed causes, with narrow exceptions for certain fixed-term leases. Deposits (RCW 59.18.260–.280): a written rental agreement is required, a landlord who collects a deposit without a written move-in checklist is liable for its amount, deposits are held in trust, and a full and specific statement with any refund is due within **30 days** after the tenant vacates. Entry (RCW 59.18.150): **two days'** written notice, one day to show the unit. Nonpayment (RCW 59.12.030): a **14-day** notice to pay or vacate.

Neighbors can differ completely. **Idaho** requires a deposit refund within **21 days** after the tenant surrenders the premises unless the lease sets a time, and in any event within **30 days**, with an itemized statement and no charge for normal wear and tear (Idaho Code 6-321); and it forbids local governments to regulate rents, fees or deposits on private residential property (Idaho Code 55-306). Many states have no statewide rent limit; some cities add rules of their own. So learn to read the law yourself: open your legislature's residential landlord–tenant chapter, read the

definitions first, then the sections on deposits, entry, rent, landlord duties, termination and remedies, and note each section number and the date you read it. Check city and county codes and your attorney general's plain-language guide, recheck before every purchase and rent increase, and ask a landlord–tenant attorney when a rule is unclear.

Run the numbers. The law changes several Deal Analyzer inputs. Keep "Rent growth" at or below any statutory limit for sitting tenants, and remember that a 90-day notice delays every increase. Raise "Vacancy" where notice periods or court timelines lengthen turnover, and put compliance costs — notices, a relocation payment where it applies, an attorney's help — in "Other expenses" or reserves. In this example, an eviction costing $1,500 in court and attorney fees plus three months of lost rent on a $1,800 unit costs $6,900. Model a below-market rent rising at the lawful pace, not overnight, and if you plan a house hack in Oregon or Washington, read the owner-occupancy rules closely. The classic mistakes: assuming another state's rules apply; trusting a forum post over the statute; projecting rent growth above the legal limit; ignoring notice periods; and imagining any shortcut around a court eviction.

PICTURE STUDY



An Old Rear-Tenement in Roosevelt Street, Jacob Riis, 1890 · Drawing after a photograph, printed in How the Other Half Lives · Published in Jacob Riis, How the Other Half Lives (New York, 1890)
Image: Wikimedia Commons, public domain

Jacob Riis was a Danish-born New York reporter who photographed the city's tenements and published his pictures, many redrawn as engravings like this one, in *How the Other Half Lives* in 1890. A "rear tenement" was a second building crowded into the back yard behind a street-front tenement, reached through an alley, with little light or air. Pictures like this one helped persuade New York's lawmakers to pass the Tenement House Act of 1901. The drawing opens this lesson because landlord–tenant and housing laws begin with real buildings and real conditions — and because the rules they produce differ from place to place and change over time.

Look closely

- Look at the open wooden galleries. What do they tell you about how residents reached their rooms and where they spent time?
- Find the laundry lines. Why would families hang washing across a yard and from the galleries rather than indoors?
- Notice how much of the picture the building fills and how little sky shows. What would that mean for light and fresh air in the rooms behind the galleries?

- Find the people at the railings and doors. How does the artist make the building's size feel compared with them?

Talk about it

1. Which modern habitability duties — weatherproofing, plumbing, light, safe exits — do you think this building would fail, and why do statutes now spell them out?
2. Why might the rules for a building like this differ between New York, Oregon and Idaho today, and how would an investor find out?
3. The law of Moses told a lender to stand outside a debtor's door. What does respect for a tenant's home look like for a landlord today, beyond what any statute requires?

PROJECT

My State's Landlord–Tenant Sheet

You will read your own state's residential landlord–tenant statute on the official legislature website and build a one-page sheet of the rules that change an investor's numbers, with section numbers and the date you read them. If you live in Oregon, Washington or Idaho, compare your findings with this lesson; if not, compare your state with one of them.

This is reading and note-taking from official sources only. Plain-language summaries from your state attorney general or housing agency are welcome as a guide, but every rule on your sheet must be checked in the statute.

You will need

- Your state legislature's website (search "[state] residential landlord tenant act")
- Your state attorney general's or housing agency's landlord–tenant page
- Your city or county code website
- The Deal Analyzer, Rental worksheet

Steps

1. Find your state's residential landlord–tenant chapter and write its official name and chapter number.
2. Fill in a table with section numbers: deposit limit (if any), how deposits must be held, return deadline; entry notice; rent-increase notice and any annual limit; landlord habitability duties; notice for nonpayment; rules for ending month-to-month and fixed-term tenancies; any just-cause rule.
3. Check your city and county for added rules (rent registration, inspections, relocation payments) and note any you find.
4. Compute, for a pretend $1,750 rent, the largest lawful increase this year and the earliest date it could take effect if notice were given today.
5. Compute the deposit deadline for a pretend move-out on the last day of next month.

6. Run a listing in the Rental worksheet twice: once with your usual assumptions and once with rent growth capped at your state's limit (if any), vacancy raised one point for longer notice periods, and $500 a year of compliance costs in "Other expenses." Record both cash flows.
7. Print the worksheet, attach your sheet, and write a verdict paragraph on how your state's law changes the deal — buy, negotiate to a stated price, or walk away. File it in the deal binder.

INVESTOR'S NOTEBOOK

1. Flashcards: URLTA, habitability, security deposit, wear and tear, notice of entry, rent-increase notice, rent stabilization, just cause, unlawful detainer, certificate of occupancy.
2. Draw a three-column comparison table — Oregon, Washington, Idaho — with rows for rent-increase notice, annual limit (2026), new-construction exemption, deposit deadline, entry notice and nonpayment notice, citing each section.
3. Trap list "Landlord law": ending with — Read the statute, cite the section, date it; and never self-help.

KEY FORMULAS

$$\text{Maximum new rent} = \text{current rent} \times (1 + \text{allowed annual } \%)$$

$$\text{Allowed annual } \% \text{ (OR and WA formula)} = \min(7\% + \text{CPI},\ 10\%)$$

$$\text{Deposit deadline} = \text{move-out date} + \text{statutory days}$$

$$\text{Cost of an eviction} = \text{court and attorney costs} + \text{months of lost rent} \times \text{monthly rent}$$

From history. Jacob Riis came to New York from Denmark in 1870 as a poor immigrant and slept in police lodging houses before becoming a reporter. He was among the first American journalists to use flash photography, which let his camera see into rooms where daylight never reached. His pictures, shown in lantern-slide lectures and printed as drawings in his books, helped persuade lawmakers that housing standards were a public matter.

Example 1. In this example, an Oregon tenant has rented a 1985-built house for three years at $1,800 a month. The landlord wants an increase to take effect in 2026. What is the largest lawful increase, and what notice is required? What if the house were brand new, with its first certificate of occupancy issued eight years before the notice?

Show solution

1. The tenancy is past its first year, and there has been no increase in the last 12 months.
2. 2026 limit (ORS 90.324, published by DAS): 9.5%. $\$1{,}800 \times 0.095 = \$171$.
3. Maximum new rent: $\$1{,}800 + \$171 = \$1{,}971$.
4. Notice: written, at least 90 days before the effective date, stating the amount of the increase, the new rent and the effective date (ORS 90.323).
5. An 8-year-old certificate of occupancy is less than 15 years old, so the percentage limit does not apply — but the 90-day notice, the once-per-12-months rule and the notice contents still do.

Answer: At most $1,971 with at least 90 days' written notice. The newer house is exempt from the percentage cap but not from the notice rules.

Example 2. In this example, a Washington landlord's tenant pays $2,000 a month in a 1990s duplex; the owner does not live there. Find the largest lawful increase for 2026. Then decide whether the cap applies if the owner had lived in the other unit since the tenancy began.

Show solution

1. 2026 limit published by the Department of Commerce: 9.683%. $\$2{,}000 \times 0.09683 = \$193.66$.
2. Maximum new rent: $2,193.66, with at least 90 days' written notice (RCW 59.18.140) and no increase during the first 12 months of the tenancy.
3. Owner-occupied case: RCW 59.18.710 exempts a duplex, triplex or fourplex in which the owner occupied a unit at the start of the tenancy and continues to — if the owner is an individual, not a REIT, corporation or LLC with a corporate member.
4. The exemption removes the percentage cap, not the 90-day notice requirement.

Answer: At most $2,193.66 for the non-owner-occupied duplex. If the owner lives there as described, the cap does not apply, but 90 days' written notice is still required.

Example 3. In this example, a tenant moves out and returns the keys on June 30. By what date must the landlord account for (and refund) the deposit in Oregon, in Washington, and in Idaho if the lease sets no time?

Show solution

1. Oregon (ORS 90.300): within 31 days after the tenancy ends and possession is delivered — June 30 + 31 days = July 31.
2. Washington (RCW 59.18.280): within 30 days after termination and vacating — June 30 + 30 days = July 30.
3. Idaho (Idaho Code 6-321): within 21 days if no time is fixed by agreement — June 30 + 21 days = July 21; never later than 30 days even by agreement.

Answer: July 31 in Oregon, July 30 in Washington and July 21 in Idaho. Calendar the date the day the tenant leaves, and send an itemized statement for any deduction; wear and tear may not be charged in any of the three.

PRACTICE

1. Easy Name five subjects a state landlord–tenant act governs.

Show answer

Security deposits, notice of entry, rent increases (notice and any limits), habitability duties, and termination and eviction; also late fees, retaliation and remedies.

2. Easy What is URLTA, and when was it first published?

Show answer

The Uniform Residential Landlord and Tenant Act, a model statute published by the Uniform Law Commission in 1972 (revised in 2015), which many states used in writing their own laws.

3. Easy Name three "self-help" actions a landlord may never take to remove a tenant.

Show answer

Changing the locks, removing the tenant's belongings and shutting off utilities. Eviction is always through the court process after proper notice.

4. Medium As of 2026, how much written notice must Oregon and Washington landlords give before most rent increases?

Show answer

At least 90 days in both states (ORS 90.323; RCW 59.18.140), with exceptions such as week-to-week tenancies in Oregon and certain subsidized tenancies in Washington.

5. Medium In this example, an Oregon rent of $1,450 may rise by the 2026 limit of 9.5%. Find the maximum new rent.

Show answer

$\$1{,}450 \times 1.095 = \$1{,}587.75$.

6. Medium In this example, a Washington rent of $1,700 may rise by the 2026 limit of 9.683%. Find the maximum new rent.

Show answer

$\$1{,}700 \times 0.09683 \approx \$164.61$; maximum about $1,864.61.

7. Medium How much notice must a landlord give before entering in Oregon and in Washington (non-emergency), as of 2026?

Show answer

Oregon: at least 24 hours' actual notice, at reasonable times (ORS 90.322). Washington: at least two days' written notice, or one day to show the unit to prospective tenants or buyers (RCW 59.18.150).

8. Hard A Washington investor buys a fourplex through an LLC whose only member is a corporation and moves into one unit. Does the owner-occupied exemption from the rent-increase limit apply? Explain.

Show answer

No. RCW 59.18.710 says the owner-occupied exemptions do not apply where the owner is a real estate investment trust, a corporation or an LLC in which at least one member is a corporation.

9. Hard In this example, an Oregon landlord who owns six rental units ends a month-to-month tenancy after the first year because his daughter will move in. Rent is $1,600. What notice and payment does ORS 90.427 require, as of 2026?

Show answer

At least 90 days' written notice stating the reason and supporting facts, and a payment equal to one month's rent, $1,600, delivered with the notice. Landlords with an ownership interest in four or fewer units are exempt from the payment, but he owns six.

10. Hard In this example, a tenant in Idaho moves out on March 3, and the lease says deposits will be returned "within 30 days." What is the deadline, and could the lease have set 45 days?

Show answer

April 2 (30 days after March 3). No — Idaho Code 6-321 allows 21 days unless the agreement fixes a time, but in any event no more than 30 days.

11. **Challenge** In this example, a Washington rental has a below-market rent of $1,500 and comps support $1,750. The tenant has been there four years, and the 2026 limit is 9.683%. How much can rent rise in 2026, and roughly how long until it reaches $1,750 if the same percentage were allowed each year?

    Show answer

    2026: $\$1{,}500 \times 1.09683 \approx \$1{,}645.25$. A second year at about the same rate: $\approx \$1{,}804$, so it would pass $1,750 in the second increase, with each increase needing 90 days' notice and at least 12 months apart. Model the rent rising in steps, not immediately.

12. **Challenge** Explain how the 1901 New York Tenement House Act and today's Oregon and Washington statutes illustrate the same principle for investors, without taking a side on whether the laws are good.

    Show answer

    In each case the legislature set rules that change what a rental must provide or how it may be priced and ended, and those rules carry costs and timelines that differ by place and change over time. An investor's job is to know the current rules where he buys, comply fully, and build their costs into the analysis before buying.

COMMON MISTAKES

- Assuming one state's rules apply everywhere. Deposits, notices, rent limits and eviction rules differ by state and sometimes by city.
- Relying on a forum post, an old article or another landlord's memory instead of the current statute with its section number.
- Projecting rent increases for sitting tenants above the legal limit, or forgetting the 90-day notice delay in Oregon and Washington.
- Missing the deposit-accounting deadline or charging for normal wear and tear.
- Treating an exemption as total. New-construction and owner-occupancy exemptions remove the percentage cap but not notice requirements.
- Imagining any shortcut around eviction. Lockouts, utility shutoffs and removing belongings are unlawful; eviction is a court process.

Make it a game · Statute Bingo. Make bingo cards with squares such as “90 days,” “24 hours,” “two days,” “31 days,” “30 days,” “21 days,” “14 days,” “9.5%,” “9.683%,” “15 years” and “12 years.” A parent reads a situation from this lesson (“Washington deposit deadline,” “Oregon 2026 rent limit,” “Washington notice to pay or vacate”). Players cover the matching square and must name the state and section when they call bingo. A wrong section number means the player keeps playing without the win.

Scripture. “When thou dost lend thy brother any thing, thou shalt not go into his house to fetch his pledge. Thou shalt stand abroad, and the man to whom thou dost lend shall bring out the pledge abroad unto thee.” (Deuteronomy 24:10–11, KJV)

Long before any statute on notice of entry, the law of Moses told a lender to stand outside a debtor’s door rather than walk in and take what was owed. A landlord who gives proper notice, respects a tenant’s home and collects only through lawful means is keeping the spirit of this command as well as the letter of his state’s law.

UNIT 2

Markets, Neighborhoods and Comparables

In July 1915 the government began auctioning town lots above a tent city at Ship Creek, Alaska, where a new railroad had brought jobs, and Anchorage was born. That order of events — jobs, then people, then housing demand, then land value — is where this unit begins. You will learn to choose a **market** from free public data on population, jobs, incomes and new construction; to compute the **price-to-rent ratio** and the share of rent consumed by taxes and insurance; and to weigh investing near home against investing far away. Then you will read a **neighborhood** the way Jane Jacobs read Hudson Street — on foot, at different hours — and learn the investor's Class A, B, C and D shorthand as a description of buildings and economics, never of people, with fair-housing rules as settled law.

The middle of the unit is the craft of **comparables**. You will estimate what a home will really rent for from **rent comps**, adjusted for garages, laundry, bathrooms and utilities, and checked against HUD's Fair Market Rents; and you will estimate **after-repair value** from sold comps of renovated homes with an appraiser's adjustment grid. The unit ends with the law: **landlord–tenant rules differ by state**, and you will read Oregon's and Washington's statutes as of 2026 — rent-increase notice and limits, deposits, entry and termination — and learn to find and read your own state's act, then build the cost of compliance into the numbers.

PREREQUISITES

- Can compute ratios, percents, growth rates with an exponent and weighted averages
- Has completed Unit 1 and can run the Deal Analyzer's Rental worksheet from a listing
- Can find a real for-sale listing, rental listings and the county assessor's page for a property
- Has the deal binder started, with the Four Returns Sheet and the Ten-Year Goal page

MASTERY CHECKLIST

- ☐ I can build a market sheet from public data and compute population growth, household demand against permits, price-to-rent and the tax-and-insurance burden.
- ☐ I can compare investing near home and far away in dollars and in risk.
- ☐ I can classify a property and a neighborhood as A, B, C or D from evidence about buildings and economics, and set Deal Analyzer assumptions to fit.
- ☐ I can describe a neighborhood and write a rental ad in fair-housing terms, describing the home and never the people.
- ☐ I can build and reconcile a rent-comp grid, adjusting for features and utilities, and use HUD Fair Market Rents correctly as a benchmark.
- ☐ I can build an ARV grid from sold renovated comps with time, size and feature adjustments, and check it with price per square foot.
- ☐ I can state Oregon's and Washington's 2026 rent-increase notice and limits, deposit deadlines and entry notice, and compute a lawful increase and a deposit deadline.

- ☐ I can find and read my own state's landlord–tenant statute and build compliance costs into an analysis.

OPTIONAL BOOKS AND RESOURCES FOR THIS UNIT

- **School Launch Deal Analyzer**: Free. Use the Rental worksheet for market and rent-comp analyses and the BRRRR and Fix & flip worksheets to see how ARV drives a deal. Used in every project this unit. Ages 13 and up.
- **U.S. Census Bureau: American Community Survey**: Free and official. Yearly estimates of population, household income, median gross rent and home values for counties, cities and smaller areas — the core of the Lesson 2.1 market sheet. Ages 14 and up.
- **HUD User: Fair Market Rents**: Free and official. HUD's Fair Market Rents by county and bedroom count, with methodology documents explaining that FMRs are gross rents at the 40th percentile. Use as a benchmark in Lesson 2.3, never as market rent. Ages 14 and up.
- **Long-Distance Real Estate Investing, by David Greene (BiggerPockets Publishing)**: A printed book from the publisher's own store. A practical guide to choosing a market and building a local team when investing far from home, with useful chapters on evaluating neighborhoods and comps. Read with Lessons 2.1–2.2. Ages 15 and up.
- **Washington State Legislature: RCW 59.18, Residential Landlord-Tenant Act**: Free and official. The full text of Washington's landlord–tenant act, including the rent-increase, deposit and entry sections cited in Lesson 2.5; Oregon's act is ORS chapter 90 on the Oregon Legislature's website. Use it to practice reading a statute by section. Ages 15 and up.

Not required. Every project in this unit works without them. School Launch has no ties to these authors, publishers or companies.

LESSONS IN THIS UNIT

2.1 Choosing a Market: Jobs, People and Price-to-Rent — 3 sessions of 50 minutes

2.2 Reading a Neighborhood: Property Classes and Tenant Demand

3 sessions of 50 minutes

2.3 Rent Comps: What Will It Really Rent For? — 3 sessions of 50 minutes

2.4	**Sale Comps and After-Repair Value**	3 sessions of 50 minutes
2.5	**Landlord–Tenant Law Differs by State**	3 sessions of 50 minutes

Unit 2 test

Closed notes, basic calculator only. Twenty four-choice questions, 5 points each, 100 points total. Allow about two minutes per question — set a timer for 40 minutes. Show the arithmetic for every calculation question on scratch paper. Choose the one BEST answer; aim for 80% (16 of 20) or better, and rework every miss. Figures marked "in this example" are examples, and statutory figures are stated as of 2026 — always check the current law.

1. **5 pts**

   In this example, a house sells for $270,000 and rents for $1,800 a month. What is its price-to-rent ratio?

   A. 150

   B. 12.5

   C. 0.67

   D. 15.0

2. **5 pts**

   Which sequence best describes how rental demand is created in a market?

   A. Jobs bring people, people form households, and households need housing

   B. New houses attract jobs, which attract people

   C. Low prices create jobs

   D. Building permits create population growth

3. **5 pts**

   In this example, a rental pays $4,200 in taxes and $1,800 in insurance a year and rents for $2,000 a month. What is the tax-and-insurance burden?

   A. 17.5%

   B. 20%

   C. 30%

   D. 25%

4. 5 pts

In this example, a city adds about 1,200 households a year while builders complete about 2,500 new rental and for-sale units a year for several years. A landlord there should most expect:

A. Rapidly rising rents

B. No change, since permits do not affect rents

C. Rising vacancy and pressure on rents as supply outruns demand

D. Higher property taxes only

5. 5 pts

In investor shorthand, a neighborhood's class (A, B, C or D) should describe:

A. The people who live there

B. The buildings' age and condition, rents, vacancy and price trends

C. The religion or national origin of the area

D. The tenants a landlord prefers

6. 5 pts

In this example, a $130,000 older house in a Class C area rents for $1,300. The best conclusion is:

A. It passes the 1% rule, so it will cash-flow

B. It fails the 1% rule

C. Class C areas never cash-flow

D. It passes the 1% rule, but vacancy, repairs, CapEx and turnover must be raised to Class C levels before judging it

7. 5 pts

Which rental ad phrase violates the federal Fair Housing Act?

A. "No children"

B. "Fenced yard and garage"

C. "Two blocks to the bus line"

D. "No smoking"

8. 5 pts

In this example, tenants stay two years on average, each turnover costs $2,400, and rent is $1,500 a month. What is the annual turnover cost as a percent of rent?

A. 13.3%

B. 5.0%

C. 6.7%

D. 10%

9. 5 pts

Which is the best evidence of a unit's market rent?

A. The highest asking rent on a listing site

B. The rent a tenant actually agreed to pay for a similar nearby unit recently

C. The seller's pro forma rent

D. HUD's Fair Market Rent

10. 5 pts

In this example, the subject has no garage and its tenant pays all utilities. A comp leased for $1,900 with a garage (worth $75) and water, sewer and garbage included (about $100). What is the comp's adjusted rent?

A. $1,725

B. $2,075

C. $1,825

D. $1,800

11. 5 pts

HUD's Fair Market Rents are best described as:

A. Gross rents (shelter plus most utilities) at the 40th percentile of standard-quality units for recent movers

B. The average asking rent on listing sites

C. The maximum rent any landlord may legally charge

D. Net rents after utilities at the 75th percentile

12. 5 pts

In this example, market rent is $1,800. An owner asks $75 more and the unit sits 20 extra days. In the first year, the owner:

A. Gains $900

B. Breaks even exactly

C. Gains $1,184

D. Loses about $284

13. 5 pts

A seller's pro forma claims market rent of $2,300; your five adjusted comps cluster at $1,950. What should you enter in the Rental worksheet?

A. $2,300, since the seller knows the property

B. The average of the two numbers

C. $1,950, the rent supported by comps, and verify any existing leases

D. Nothing until an appraisal is ordered

14. 5 pts

To estimate the after-repair value of a dated house you plan to renovate fully, you should use:

A. Active listings of renovated homes

B. Sales of dated, unrenovated homes nearby

C. The county's assessed value

D. Recent sold comps of similar, renovated homes nearby, adjusted for differences

15. 5 pts

In this example, a comp sold 4 months ago for $400,000 in a market rising 0.5% a month. What is its time-adjusted price?

A. $408,000

B. $402,000

C. $392,000

D. $420,000

16. 5 pts

In this example, an investor estimates ARV at $320,000 with a $50,000 rehab, but the true ARV is $300,000. By how much is her 70% rule maximum offer too high?

A. $20,000

B. $14,000

C. $6,000

D. $35,000

17. 5 pts

An investor analyzing a house in Idaho, which has no obligation to publicly disclose sale prices, can best find sold-price evidence by:

A. Using asking prices instead

B. Guessing from price per square foot of listings

C. Working with an agent who can pull closed sales from the MLS, and checking assessor and appraiser data where available

D. Skipping comps

18. 5 pts

As of 2026, an Oregon landlord's tenant of three years in a 1990 building pays $1,600. The 2026 limit is 9.5%. What is the maximum lawful new rent for an increase taking effect in 2026, and the minimum notice?

A. $1,760, 30 days

B. $1,752, 90 days' written notice

C. $1,752, 30 days

D. Any amount, 90 days

19. 5 pts

As of 2026, Washington's Residential Landlord-Tenant Act requires a landlord, except in emergencies, to give what notice before entering a tenant's unit to make repairs?

A. At least two days' written notice

B. No notice

C. 24 hours' verbal notice

D. 30 days' notice

20. **5 pts**

A tenant stops paying rent. In every state, which is the only lawful way for a landlord to regain possession?

A. Changing the locks while the tenant is out

B. Shutting off the utilities until the tenant leaves

C. Removing the tenant's belongings to the curb

D. Giving the notice the state requires and, if needed, obtaining a court judgment and having the sheriff enforce it

ANSWER KEY

1. B. $\$270{,}000 \div (\$1{,}800 \times 12) = \$270{,}000 \div \$21{,}600 = 12.5$. A divides by monthly rent; C is the rent-to-price ratio in percent.
2. A. Housing demand is derived from jobs and the people they bring, as Anchorage's 1915 tent city showed. New construction adds supply; it does not create demand (B, D).
3. D. $\$6{,}000 \div \$24{,}000 = 25\%$ of rent goes to taxes and insurance before any other cost. A counts taxes only.
4. C. New supply far above household growth means more units competing for fewer tenants — Hoyt's overbuilding pattern. Raise the vacancy assumption and check rent comps.
5. B. Class is shorthand for buildings and economics. Describing or sorting the people who live there, or preferred tenants, conflicts with fair-housing law.
6. D. $\$1{,}300 \div \$130{,}000 = 1.0\%$ passes the screen, but Class C houses usually carry higher vacancy, repair, CapEx and turnover costs that can turn the cash flow negative.
7. A. It states a limitation based on familial status, a protected class. The others describe the property or apply equally to all applicants.
8. C. $\$2{,}400 \div 2 = \$1{,}200$ a year; $\$1{,}200 \div \$18{,}000 \approx 6.7\%$. A forgets to divide by the two-year tenancy.
9. B. A recent leased rent for a truly comparable unit is the strongest evidence. Asking rents may never lease, pro formas are sales pitches, and FMR is a gross rent at the 40th percentile.
10. A. The comp is better on both points, so subtract: $\$1{,}900 - \$75 - \$100 = \$1{,}725$. B adds instead of subtracting.
11. A. FMRs are gross rents at the 40th percentile. They are not legal limits (C) and must be adjusted for tenant-paid utilities before comparing with a market rent.
12. D. Lost rent $\$1{,}800 \times 12 \div 365 \times 20 \approx \$1{,}184$; extra rent $\$75 \times 12 = \$900$; net about $-\$284$.
13. C. Comps are the evidence; a pro forma is a claim. Averaging in an unsupported figure (B) still overstates income.
14. D. ARV comes from closed sales in the same condition the subject will be in after repairs. Unrenovated sales (B) show as-is value, not ARV; listings (A) are not sales.

15. A. $\$400{,}000 \times 0.005 \times 4 = \$8{,}000$; rising prices mean the older sale is adjusted up to $408,000. C adjusts the wrong way.
16. B. Her offer $\$320{,}000 \times 0.70 - \$50{,}000 = \$174{,}000$; true $160,000; too high by $14,000, which is 70% of the ARV error.
17. C. In non-disclosure states, closed-sale data comes mainly from the MLS through an agent, and from assessor, appraiser or title sources where shared.
18. B. $\$1{,}600 \times 1.095 = \$1{,}752$, with at least 90 days' written notice and no more than one increase in 12 months (ORS 90.323–90.324). A uses 10%.
19. A. RCW 59.18.150 requires at least two days' written notice (one day to show the unit to prospective tenants or buyers). Oregon's rule, 24 hours' actual notice (C), is a different state's law.
20. D. Eviction is a court process after proper notice. Lockouts, utility shutoffs and removing belongings are unlawful self-help everywhere.

PORTFOLIO PIECE: THE DEAL BINDER — MARKETS AND COMPS

Add this unit's five pieces to your deal binder: My Market Sheet for your county and one comparison market, with growth rates, household demand against permits, price-to-rent and tax-and-insurance burden (2.1); the Neighborhood Walk with three timed walks, official data, a class rating with building-based reasons and a fair-housing-compliant description (2.2); the Rent-Comp Grid with four to six adjusted comps, a reconciled rent and an FMR check (2.3); the ARV Grid with sold renovated comps, adjustments, gross-adjustment percents and a price-per-square-foot check, run in the Fix & flip and BRRRR worksheets at full and reduced ARV (2.4); and My State's Landlord–Tenant Sheet with section numbers, a lawful-increase and deposit-deadline calculation, and a compliance-adjusted Rental worksheet (2.5).

Each analysis ends with a printed worksheet and a one-paragraph verdict — buy, negotiate to a stated price, or walk away. Every input carries its source and date; every statute carries its section number and the date you read it.

LOOK FOR	WHAT IT MEANS
Market sheet	Data come from official public sources with dates; growth, household demand, permits, price-to-rent and burden are computed correctly; the comparison and verdict are supported by the numbers.
Neighborhood walk	Three walks at different times are recorded on public streets; official data are used and compared like with like; the class rating rests only on buildings and economics; the property description is fair-housing compliant.
Rent comps	Comps match the subject, adjustments go in the right direction with stated values, utilities are handled correctly, the reconciliation is explained, and FMR is used only as a benchmark.
ARV grid	Only sold comps in the renovated condition class are used; time, size and feature adjustments are correct; gross adjustments guide the weights; and the deal is tested at a lower ARV.
Landlord–tenant sheet	Every rule cites a section of the official statute with the date read; calculations of a lawful increase and a deposit deadline are correct; compliance costs appear in the worksheet; the law is described as mechanics without opinion.

LOOK FOR	WHAT IT MEANS
Records and judgment	Every worksheet is printed with sources noted, and each verdict — including walking away — is defended with the evidence gathered.

UNIT 3

Analyzing a Rental Deal

For more than a century, nearly every lease in New York City ended on the same May morning, and landlords learned the hard way that rent on paper is not rent in hand. This unit teaches you to know every number in a rental. You will follow one house, the Elm Street house, from its rent to its verdict. You will build **gross scheduled income**, subtract **vacancy and credit loss** to find **effective gross income**, and list every **operating expense**, including the **capital expenditures** beginners forget, budgeted component by component. You will compute **net operating income**, **cash flow**, the **cap rate**, **cash-on-cash return** and the **debt service coverage ratio**, and learn what each one can and cannot tell you.

Then you will learn the shortcuts investors use to sort many listings quickly — the **1%**, **50%** and **70%** rules — and see, with real arithmetic, where each one misleads. Finally you will run full deals in the School Launch Deal Analyzer's Rental worksheet, **stress-test** them, and solve backward for the price that would make a failing deal work. The Elm Street house, by the way, loses about $66 a month at its asking price. Most deals do. By the end of the unit your deal binder will hold your first complete analyses, each with a printed worksheet and a verdict — buy, negotiate or walk away — that you can defend line by line.

PREREQUISITES

- Can compute percents, convert between monthly and annual amounts, and solve a one-step equation for an unknown
- Has a rent-comp grid from Lesson 2.3 and can choose a market rent from comparable rentals
- Can find a property's assessed value and tax bill on a county assessor or treasurer website (Unit 2)
- Has opened the School Launch Deal Analyzer, can switch between its worksheets, and keeps a deal binder

MASTERY CHECKLIST

- ☐ I can compute gross scheduled income, a vacancy and credit-loss allowance and effective gross income, and tell physical from economic vacancy.
- ☐ I can estimate vacancy from local data and from a turnover assumption, and decide what other income is dependable.
- ☐ I can list every operating expense of a small rental, estimate taxes after reassessment, and name what is not an operating expense.
- ☐ I can build a CapEx budget by component life and convert it to a monthly reserve and a percent of rent.
- ☐ I can compute NOI, debt service, cash flow, cap rate, cash-on-cash return, DSCR, GRM, expense ratio and break-even occupancy by hand and match the Deal Analyzer.
- ☐ I can apply the 1%, 50% and 70% rules, explain where each misleads, and use them only as screens.
- ☐ I can stress-test a deal one change at a time and in combination, and solve backward to a maximum price for a target cash flow or DSCR.
- ☐ I can write a verdict — buy, negotiate to a stated price, or walk away — defended with at least four

numbers, and refuse to massage inputs.

OPTIONAL BOOKS AND RESOURCES FOR THIS UNIT

- **School Launch Deal Analyzer**: Free. The Rental worksheet computes every measure in this unit — GSI, EGI, operating expenses, NOI, cash flow, cap rate, cash-on-cash, DSCR, GRM, break-even occupancy, the quick screens and a stress test — and prints filled-in or blank worksheets. Used in every lesson. Ages 13 and up.
- **The Book on Rental Property Investing, by Brandon Turner (BiggerPockets Publishing)**: A printed book from the publisher's own store. The standard practitioner's guide to buy-and-hold rentals, with clear chapters on income, expenses, CapEx and the "four square" analysis taught in Lesson 3.3. Read the deal-analysis chapters alongside this unit. Ages 15 and up.
- **What Every Real Estate Investor Needs to Know About Cash Flow, by Frank Gallinelli (McGraw Hill)**: A book (in print and as an e-book) from the publisher's own page that defines and works examples of NOI, cap rate, cash-on-cash, DSCR, GRM, break-even ratio and dozens of other measures. A reference for Lessons 3.3 and 3.5 and for anyone who wants the math explained twice. Ages 16 and up.
- **HUD User: Fair Market Rents**: Free, official. The Department of Housing and Urban Development's yearly estimates of typical rents by county and metro area and by bedroom count. Use it in Lessons 3.1 and 3.4 as a rough benchmark to check your rent comps — never as a substitute for them. Ages 14 and up.
- **IRS Publication 527, Residential Rental Property**: Free, official. The IRS guide for rental owners. Its list of rental expenses is a useful checklist for Lesson 3.2, and its explanation of repairs versus improvements previews Unit 9. Education, not tax advice. Ages 15 and up.

Not required. Every project in this unit works without them. School Launch has no ties to these authors, publishers or companies.

LESSONS IN THIS UNIT

3.1	**Income: Rent, Other Income and Vacancy**	3 sessions of 50 minutes
3.2	**Expenses: The Full List, CapEx and Reserves**	3 sessions of 50 minutes
3.3	**NOI, Cash Flow, Cap Rate and Cash-on-Cash**	3 sessions of 50 minutes

3.4	**Rules of Thumb and Their Limits: 1%, 50% and 70%**	3 sessions of 50 minutes
3.5	**The Full Deal Worksheet and the Stress Test**	3 sessions of 50 minutes

Unit 3 test

Closed notes and closed notebook; a basic calculator is allowed. Twenty four-choice questions, 5 points each, 100 points total. Allow about two minutes per question — set a timer for 40 minutes. Show the arithmetic for every calculation question on scratch paper, and choose the one BEST answer. Aim for 80% (16 of 20) or better, and rework every miss in your investor's notebook. Figures marked "in this example" are examples; real rents, taxes, insurance and interest rates vary by place and year. Unless a question says otherwise, use the Deal Analyzer's conventions: repairs and CapEx on scheduled rent, management on collected rent.

1. **5 pts**

   In this example, a duplex has two units at $1,200 a month and a coin laundry that nets $100 a month. What is its gross scheduled income?

   A. $28,800

   B. $27,000

   C. $30,000

   D. $28,200

2. **5 pts**

   Economic vacancy includes which of the following?

   A. Empty units, rent owed but never paid, and concessions

   B. Only units that are physically empty

   C. Only rent owed but never paid

   D. Vacancy plus the property-management fee

3. **5 pts**

   Which of these is NOT an operating expense?

   A. Property taxes

   B. Mortgage principal and interest

   C. The CapEx reserve

   D. Landlord (dwelling) insurance

4. 5 pts

In this example, GSI is $30,000, vacancy is 5% and management is 8% of collected rent. What is the management fee for the year?

A. $2,400

B. $2,160

C. $2,520

D. $2,280

5. 5 pts

Which is the most honest way to budget capital expenditures for a 25-year-old house?

A. Divide each major component's replacement cost by its useful life, adjusting for its age

B. Set CapEx to zero until something breaks

C. Use the seller's repair records from last year

D. Use the same dollar figure as the monthly repair budget

6. 5 pts

A seller says, "The roof is two years old, so you can leave CapEx at zero." The best response is:

A. Agree, because roofs are the only large replacement

B. Agree for two years, then add CapEx

C. Keep a CapEx allowance, because the roof still wears out each year and other components keep aging

D. Raise the repair budget instead and leave CapEx at zero

7. 5 pts

In this example, a rental's EGI is $28,500, operating expenses are $11,400 and the price is $285,000. What is the cap rate?

A. 5.7%

B. 6.0%

C. 4.0%

D. 10.0%

8. 5 pts

In this example, a property cash-flows $2,400 a year. The investor paid $50,000 down, $6,000 in closing costs and $4,000 for upfront repairs. What is the cash-on-cash return?

A. 4.8%

B. 4.3%

C. 2.4%

D. 4.0%

9. 5 pts

A rental's DSCR is 0.95. What does that mean?

A. Its NOI does not fully cover its annual mortgage payments

B. It earns a 0.95% return on cash invested

C. It is 95% occupied

D. It meets a typical lender's minimum

10. 5 pts

A rental's break-even occupancy is 97%. Which statement is true?

A. It will be 97% occupied

B. Its cap rate is 3%

C. It must collect 97% of scheduled income just to pay operating expenses and the mortgage

D. Its expense ratio is 97%

11. 5 pts

In this example, a property's cap rate is 5.5% and the loan's constant (annual payment per dollar borrowed) is 8.0%. What happens as the investor borrows more?

A. Cash-on-cash rises, because leverage always helps

B. Cash-on-cash falls, because each borrowed dollar costs more than it earns

C. Nothing, because cap rate ignores financing

D. The cap rate falls

12. 5 pts

In this example, a house lists for $180,000, needs $20,000 of repairs and would rent for $1,900. How does it fare on the 1% rule?

A. Passes at 1.06%

B. Passes at exactly 1.00%

C. Fails at 0.90%

D. Fails at 0.95%

13. 5 pts

The “50%” in the 50% rule is meant to cover:

A. Vacancy and all operating expenses, but not the mortgage payment

B. Operating expenses and the mortgage payment

C. Only taxes and insurance

D. Vacancy only

14. 5 pts

In this example, a flip’s after-repair value is $300,000 and the rehab budget is $50,000. What is the 70% rule maximum offer?

A. $210,000

B. $175,000

C. $160,000

D. $145,000

15. 5 pts

A $90,000 house rents for $1,150 and passes the 1% rule easily, yet its full worksheet loses money. The most likely reason is:

A. The 1% rule is always wrong

B. Its vacancy, repairs, CapEx and turnover are much higher than the rule assumes

C. The worksheet ignores rent

D. Cheap houses have no property taxes

16. 5 pts

In this example, a rental's NOI is $15,600. You want $100 a month of cash flow, will put 25% down, and a 7%, 30-year loan costs $0.0066530 a month per dollar borrowed. What is the highest price you should offer?

A. About $180,400

B. About $260,500

C. About $225,500

D. About $240,500

17. 5 pts

A lender requires a DSCR of 1.25. To find the most you can borrow, what is the first step?

A. Divide NOI by 1.25 to find the maximum annual debt service

B. Multiply NOI by 1.25

C. Divide the price by 1.25

D. Multiply gross rent by 1.25

18. 5 pts

In this example, a deal shows +$90 a month as entered, but −$60 a month with rent 10% lower, and its DSCR is 1.10. Your written criteria are $100 a month and DSCR 1.25. The best verdict is:

A. Buy at the asking price, since it cash-flows today

B. Buy, and plan to raise the rent after closing

C. Negotiate to a price that meets your criteria, or walk away

D. Lower the vacancy assumption until it meets your criteria

19. 5 pts

An analyst changes vacancy from 6% to 2% "because the house is rented right now." This is best described as:

A. A conservative assumption

B. A massaged input not supported by evidence

C. Required by the 50% rule

D. Correct whenever a lease is in place

20. **5 pts**

In this example, a house's market rent is $2,000, but the current tenant pays $1,700 under a lease with 6 months left. What is the first year's scheduled rent if you raise it to market when the lease ends?

A. $24,000

B. $20,400

C. $23,100

D. $22,200

ANSWER KEY

1. C. $(\$2{,}400 + \$100) \times 12 = \$30{,}000$. A counts the rent but forgets the laundry; GSI includes dependable other income.
2. A. Economic vacancy is every dollar of GSI not collected for any reason. B describes physical vacancy, which is always equal to or smaller than economic vacancy.
3. B. The mortgage payment is debt service, subtracted after NOI to find cash flow. Putting it inside operating expenses makes NOI and the cap rate wrong.
4. D. EGI $\$30{,}000 \times 0.95 = \$28{,}500$; $\$28{,}500 \times 0.08 = \$2{,}280$. A applies 8% to scheduled rent, the convention some other tools use but not this one.
5. A. A component-by-component budget captures the roof, furnace, water heater, floors, appliances and paint. B ignores certain wear; C and D measure small repairs, not replacements.
6. C. A new roof lowers the near-term risk but not the yearly wear, and the furnace, water heater, flooring and appliances still need reserves. A is the classic beginner's mistake.
7. B. NOI $\$28{,}500 - \$11{,}400 = \$17{,}100$; $\$17{,}100 \div \$285{,}000 = 6.0\%$. D divides EGI by price, forgetting the expenses.
8. D. Cash invested $\$60{,}000$; $\$2{,}400 \div \$60{,}000 = 4.0\%$. A divides by the down payment alone and overstates the return.
9. A. DSCR is NOI ÷ debt service; below 1.00 the property's income falls short of the payments, and many lenders commonly want 1.20–1.25 or more. C confuses DSCR with occupancy.
10. C. Break-even occupancy is (operating expenses + debt service) ÷ GSI. At 97%, a few weeks of vacancy or one unpaid month pushes the property into a loss.
11. B. This is negative leverage: borrowed money costs 8.0% a year but the property earns 5.5% on it. Leverage helps only when the cap rate exceeds the loan constant; the cap rate itself does not change (D).
12. D. $\$1{,}900 \div (\$180{,}000 + \$20{,}000) = 0.95\%$. A leaves the repairs out of the denominator.
13. A. The rule estimates that vacancy plus every operating expense takes about half of gross rent; you subtract principal and interest separately. B double-counts the mortgage.

14. C. $\$300{,}000 \times 0.70 - \$50{,}000 = \$160{,}000$. A forgets to subtract the rehab; B and D use 75% and 65%.
15. B. Low-priced houses often carry high vacancy, repair and turnover costs that a rent-to-price screen cannot see. The rule is a useful screen (so A goes too far), not a verdict.
16. D. Max debt service $\$15{,}600 - \$1{,}200 = \$14{,}400$, $\$1{,}200$ a month; loan $\$1{,}200 \div 0.0066530 \approx \$180{,}369$; price $\$180{,}369 \div 0.75 \approx \$240{,}492$. A stops at the loan amount.
17. A. Maximum debt service is NOI ÷ required DSCR; then convert the monthly payment to a loan amount. B would let the payments exceed the income.
18. C. The deal fails both written criteria and a realistic stress. Solve backward for a qualifying price; if the seller will not accept it, walk away. D is massaging inputs.
19. B. Every tenant eventually leaves, and turnover brings vacancy and credit loss. Lowering vacancy without local data is massaging the numbers to make a deal look better.
20. D. $\$1{,}700 \times 6 + \$2{,}000 \times 6 = \$10{,}200 + \$12{,}000 = \$22{,}200$. A assumes market rent all year; the lease must run its term.

PORTFOLIO PIECE: DEAL BINDER: ANALYZING A RENTAL DEAL

This unit fills the first real section of your deal binder. File the Income Sheet (3.1) and the Expense Build with its CapEx table (3.2) for your first listing; the Four Squares page with its printed Rental worksheet and first verdict (3.3); the Twenty-Listing Screen spreadsheet with three full worksheets and your note on how well the rules of thumb fit your market (3.4); and the capstone of the unit, Three Full Deals (3.5) — each with its summary page, printed worksheet, stress-test results, backward-solved offer price and written verdict.

A parent or mentor reviews the binder with the rubric below and asks you to defend one verdict aloud. A careful walk-away earns the same credit as a deal you would buy: the skill being graded is judgment, not optimism.

LOOK FOR	WHAT IT MEANS
Evidence-based income	Every rent comes from at least three named comps, vacancy is supported by local data or a turnover estimate, and only dependable other income is counted.
Complete, honest expenses	Taxes are estimated after reassessment, insurance is a landlord-policy figure, CapEx comes from a component table, management is included, and nothing is left at zero without a stated reason.
Correct calculations	NOI, cash flow, cap rate, cash-on-cash, DSCR and break-even occupancy are worked by hand with formulas shown and match the printed Deal Analyzer worksheet to the dollar.
Stress test and offer price	Each full deal shows the five single-change stress results, at least one combined stress, and a maximum offer solved backward from written criteria and checked in the tool.
Defended verdicts	Each verdict — buy, negotiate to a stated price, or walk away — cites at least four numbers, names the riskiest assumption, and gives an honest counter-offer rationale where one applies.

3.1 Income: Rent, Other Income and Vacancy

OBJECTIVES

- Compute gross scheduled income from monthly rent and other income, and effective gross income after vacancy and credit loss.
- Distinguish physical vacancy from economic vacancy, and name the parts of economic vacancy: empty units, credit loss and concessions.
- Estimate a vacancy rate from local data and from a turnover assumption (average length of stay and months to re-rent).
- Identify legitimate other income — laundry, parking, storage, pet rent and utility bill-back — and reject income that should not be counted.
- Read a rent roll and leases for an occupied property, and enter rent, other income and vacancy correctly in the Deal Analyzer's Rental worksheet.

> **Warm-up.** Five minutes, pencil and paper. A house rents for $1,500 a month. Write how much rent it collects in a year if it is never empty, then how much if it sits empty for one month while you clean and find a new tenant. What percent of the year's rent did that one month cost? Keep the answer — it is the first vacancy rate you will compute.

WATCH

How Do You Determine The Vacancy Rate of an Area? [#AskBP 053]

BiggerPockets · 6:32

https://www.youtube.com/watch?v=rXbVh_GTNDg

> **WHEN TO WATCH**
> Watch after the fourth core idea. Brandon Turner gives three ways to estimate vacancy; write each method in your notebook and, beside it, the free source you would use for your own county.

BACKUP VIDEO

What is Vacancy Rate and Occupancy Rate in Real Estate and How to Calculate them?

Alberta Real Estate School · 7:28

https://www.youtube.com/watch?v=WV7FsvE222Y

A short worked lesson from a licensing school: pause after each example, compute the vacancy and occupancy rates yourself, then check against the answer on the screen.

KEY TERMS

gross scheduled income (GSI)

The total annual rent and other income a property would collect if every unit were rented all year at market rent and every tenant paid in full; also called gross potential income.

other income

Income from a rental property besides base rent, such as coin laundry, parking, storage, pet rent and utility bill-back.

vacancy

Income lost because a unit is empty, usually stated as a percent of gross scheduled income.

credit loss

Rent owed but never collected because a tenant does not pay; also called collection loss or bad debt.

physical vacancy

The share of units (or unit-months) that are actually empty.

economic vacancy

The share of gross scheduled income not collected for any reason — empty units, unpaid rent, concessions and below-market leases.

concession

A discount given to win or keep a tenant, such as a free first month, that lowers collected rent.

effective gross income (EGI)

Gross scheduled income minus vacancy and credit loss; the income a property can actually be expected to collect.

turnover

The process of one tenant moving out and another moving in, with the vacant time, cleaning, repairs and leasing it requires.

rent roll

A list of a building's units showing each tenant's rent, deposit, lease dates and balance owed.

market rent

The rent a unit would bring today from a typical tenant, as shown by comparable rentals.

pro forma

A projection of a property's income and expenses, often prepared by a seller or broker, that must be checked against real data.

CORE IDEAS

The story. For more than a century, New Yorkers all moved on the same morning. By a custom dating to colonial times — and for a few years after 1820 by state law — most leases in New York City ran out on May 1 at nine o'clock. Landlords announced the coming year's rents around February 1, which was sometimes called Rent Day, and tenants who would not pay had until May to find somewhere else. Then, on May 1, the city turned itself inside out. Streets jammed with carts piled with beds, chairs and stoves; cartmen charged whatever the day would bear, and farmers drove in from Long Island and New Jersey to rent out their wagons. Visitors such as the English writer Frances Trollope, in 1832, thought the whole population must be fleeing a disaster. For a landlord, Moving Day was the year's reckoning: rooms not

rented by May 1 could sit empty for months, because nearly every tenant in the city had already signed somewhere else.

How they figured it out. Moving Day packed a whole city's turnover into one morning, and it taught landlords lessons every rental owner still uses. Income depended not only on the rent asked but on how many months each room was actually let and paid for; a unit that missed the season lost far more than one month's rent, and a rent announced in February was only a hope until a tenant signed and paid. As new housing was built after the 1870s the crush eased, and the custom faded away after World War II. Meanwhile appraisers and lenders turned the landlord's arithmetic into a standard form. When the income approach to value spread through the appraisal textbooks of the 1920s and 1930s, it began with **potential gross income**, subtracted **vacancy and collection loss**, and arrived at **effective gross income**. Every rental analysis you will ever see — from a lender's worksheet to the BiggerPockets calculators to the School Launch Deal Analyzer — still starts in exactly that order.

The big idea. Rental income is estimated in three steps. First, **gross scheduled income (GSI)** is a full year of market rent for every unit plus any **other income**, as if no unit were ever empty: in the Deal Analyzer, $\text{GSI} = (\text{rent} + \text{other income}) \times 12$. Second, subtract **vacancy and credit loss**, the rent you will not collect because a unit is empty or a tenant does not pay, entered as a percent of GSI. Third, what remains is **effective gross income (EGI)**, the income the property can really be expected to produce. In this example — the house on Elm Street you will follow through this whole unit — market rent is $2,100 a month with no other income and a 6% vacancy allowance. GSI is $25,200, vacancy is $1,512, and EGI is $23,688. Those are exactly the numbers the Rental worksheet shows when you open it.

Other income is real money, but only when it is steady and documented. Common sources are coin or card laundry, parking spaces and garages, storage units, **pet rent** (a monthly charge, separate from a refundable pet deposit) and **utility bill-back**, where the owner pays a water or garbage bill and charges tenants a share. On a single-family house other income is usually zero; on small multifamily it can add a few hundred dollars a month. Do not count income that is not rent: security deposits belong to the tenant, application fees cover screening costs, and late fees are a penalty you hope never to collect. State law limits many fees, so check before you assume any. In this example, a duplex with two units at $975, laundry netting $40

and one garage rented at $60 has other income of $100 a month and GSI of $(\$1{,}950 + \$100) \times 12 = \$24{,}600$.

Vacancy comes in two kinds. **Physical vacancy** counts empty units. **Economic vacancy** counts every dollar of GSI you did not collect: empty units, **credit loss** (rent owed but never paid), **concessions** such as a free first month, and leases written below market. Economic vacancy is the one that matters for your bank account, and it is always at least as large as physical vacancy. Most vacancy comes from **turnover**: every time a tenant leaves, the unit sits empty while you clean, repair, advertise and screen. A useful estimate divides the empty months by the whole cycle. In this example, if tenants commonly stay 24 months and a unit takes one month to re-rent, vacancy is $1 \div (24 + 1) = 4\%$; add about 1% for credit loss and you are near 5%. Allowances of 5–10% are common for long-term rentals; the Deal Analyzer starts at 6%, roughly three weeks a year.

Estimate vacancy from evidence, not hope. Free sources include the Census Bureau's rental vacancy rates for your metro area, the days-on-market of rental listings near the property, and — with a parent present — a short conversation with a local property manager. Seasonality matters: in a college town or a cold-winter city, a unit that turns over in December may sit far longer than one that turns over in June, so wise landlords time lease endings for the busy season. For an occupied building, ask for the **rent roll** and copies of every lease. Compare each tenant's rent with **market rent**: a long-time tenant paying well below market is income you cannot raise overnight, because leases must run their term and state law sets notice rules (and, in Oregon and Washington, statewide limits) for increases. Never accept a seller's **pro forma** that assumes full occupancy at top rents; rebuild the income yourself from rent comps.

Run the numbers. On the Rental worksheet, income lives in three inputs: **Monthly rent (all units)**, **Other income** and **Vacancy**. Enter market rent from your Lesson 2.3 rent-comp grid — the typical comparable, not the best one — and only documented other income. Notice that the tool applies the vacancy percent to other income too, which is correct: an empty unit pays no pet rent and uses no laundry. A careful investor checks three things before trusting the income line: Is the rent supported by at least three comps? Is the vacancy rate backed by local data or a turnover estimate? Do the leases and rent roll match what the seller claims? The classic mistakes are using the seller's rent instead of comps, leaving vacancy at zero

because “it’s rented right now,” counting late fees or deposits as income, and forgetting that a below-market lease limits next year’s rent. Change the vacancy from 6% to 10% on the Elm Street house and watch EGI fall by more than a thousand dollars.

PICTURE STUDY



Moving Day: "The Last Load", Unknown artist, May 8, 1869 · Wood engraving (published cartoon) · Published in a New York illustrated weekly

Image: Wikimedia Commons, public domain

This cartoon appeared in a New York weekly a week after Moving Day in 1869, poking fun at the yearly scramble you read about in the story. The cartman has loaded everything he possibly can, and the tenant in the tall hat still wants the washstand and the tub to go on top. It opens this lesson because every cart on that street was a turnover: somewhere a landlord had an empty apartment to clean, advertise and re-rent, and another hoped a new tenant would arrive and pay. Lease timing, turnover and vacancy are the hidden side of rental income.

Look closely

- Count the kinds of household goods on the cart. What does the load tell you about how much a family moved every year?
- Look at the workman's face and posture. What is he thinking about the gentleman's request?
- Find the washstand and the tub on the sidewalk. Why might the artist have left them for the last joke?
- Notice the other carts in the background. What does that tell you about how many people were moving on the same day?

Talk about it

1. If every lease in a city ends on the same day, what happens to a landlord whose apartment is still empty a week later?
2. Why would landlords and tenants both benefit from leases that end at different times of the year?
3. The tenant in the cartoon may be moving because his rent was raised on Rent Day. How can a landlord set and announce rent honestly and fairly, treating the tenant as a neighbor rather than a number?

PROJECT

The Income Sheet

You will build the income side of a real deal. Choose one real rental-sized listing near you (a single-family house or a duplex), estimate its market rent and other income from real comparables, estimate a vacancy rate from public data and a turnover assumption, and enter everything in the Deal Analyzer's Rental worksheet. Everything is public research and a pretend purchase; contact no seller, agent or landlord except with a parent present and permission.

You will need

- One current for-sale listing of a house or small multifamily property
- Your rent-comp grid from Lesson 2.3 (or five new rental comps)
- The Census Bureau's rental vacancy rate for your metro area and a list of rental listings with days on market
- The School Launch Deal Analyzer (Rental worksheet), a calculator and your deal binder

Steps

1. Write the listing's address, price, beds, baths and square footage at the top of a page titled "Income Sheet."
2. From at least three rent comps, choose a market rent per unit — the typical comp, not the highest — and write one sentence defending it.
3. List any other income the property could fairly produce (laundry, parking, storage, pet rent, bill-back), and cross out anything that is not dependable rent.
4. Estimate vacancy two ways: from the local rental vacancy rate and days on market, and from a turnover assumption (months of stay and months to re-rent). Choose one rate and explain why.
5. Compute GSI, the vacancy allowance and EGI by hand, showing every formula.
6. Enter Monthly rent, Other income and Vacancy in the Rental worksheet (leave the other inputs as they are for now) and confirm that the tool's GSI

and EGI match yours.

7. Print the worksheet, staple it behind your Income Sheet, and write a one-paragraph verdict on the income alone: does this property's rent look strong, ordinary or weak for its price? File it in your deal binder.

INVESTOR'S NOTEBOOK

1. Flashcards: GSI, other income, vacancy, credit loss, physical vacancy, economic vacancy, concession, EGI, turnover, rent roll, market rent, pro forma — term on the front, one-sentence definition and a dollar example on the back.
2. Draw a waterfall: a tall bar labeled GSI, a short bar dropping down for vacancy, a short bar for credit loss and concessions, and the remaining bar labeled EGI. Label the Elm Street numbers on it.
3. Trap list titled "Income traps": the seller's rent, zero vacancy, late fees and deposits counted as income, the best comp instead of the typical comp, and the below-market lease that cannot be raised tomorrow.

KEY FORMULAS

$$\text{GSI} = (\text{monthly rent} + \text{monthly other income}) \times 12$$

$$\text{Vacancy and credit loss} = \text{GSI} \times \text{vacancy \%}$$

$$\text{EGI} = \text{GSI} - \text{vacancy and credit loss}$$

$$\text{Turnover vacancy} \approx \frac{\text{months empty per turnover}}{\text{months of stay} + \text{months empty}}$$

$$\text{Economic vacancy} = \frac{\text{GSI} - \text{rent actually collected}}{\text{GSI}}$$

From history. New York's custom has a living cousin. In the province of Quebec most leases still end on the same day, and so many households move at once that it is called Moving Day. For generations it was May 1, but in 1973 the provincial government moved it to July 1, effective in 1974, partly so that children could finish the school year at the same school. Hydro-Québec counted more than 700,000 households moving in 2009 — lease timing shaping vacancy on a grand scale.

WORKED EXAMPLES

Example 1. In this example, the Elm Street house rents for $2,100 a month, has no other income, and you allow 6% for vacancy and credit loss. Find GSI, the vacancy allowance and EGI, and check them in the Rental worksheet.

Show solution

1. GSI: $(\$2{,}100 + \$0) \times 12 = \$25{,}200$
2. Vacancy: $\$25{,}200 \times 0.06 = \$1{,}512$
3. EGI: $\$25{,}200 - \$1{,}512 = \$23{,}688$
4. Monthly view: $\$23{,}688 \div 12 = \$1{,}974$
5. Open the Rental worksheet: its starting inputs are this house, and the table shows the same GSI, vacancy loss and EGI.

Answer: GSI $25,200, vacancy $1,512, EGI $23,688 — about $1,974 a month you can actually expect to collect.

Example 2. In this example, a fourplex has four units at $1,000 a month. Last year one unit sat empty for 2 months, a tenant moved out owing one month's rent that was never paid, and a new tenant received $200 off for 3 months. Find the physical vacancy and the economic vacancy.

Show solution

1. GSI: $4 \times \$1{,}000 \times 12 = \$48{,}000$; unit-months available: $4 \times 12 = 48$
2. Physical vacancy: $2 \div 48 = 4.2\%$
3. Lost income: empty $2 \times \$1{,}000 = \$2{,}000$, credit loss $1,000, concession $3 \times \$200 = \$600$
4. Economic vacancy: $(\$2{,}000 + \$1{,}000 + \$600) \div \$48{,}000 = \$3{,}600 \div \$48{,}000 = 7.5\%$

Answer: Physical vacancy was about 4.2%, but economic vacancy was 7.5%. Budget for the larger number — the 6% default would have been too low for this building.

Example 3. In this example, a duplex has two units at $975, a coin laundry that nets $40 a month and one garage rented for $60. The seller's flyer also lists $1,200 a year of late fees. With 6% vacancy, find GSI and EGI and enter them in the Rental worksheet.

Show solution

1. Reject the late fees: they are a penalty, not dependable income.
2. Other income: $\$40 + \$60 = \$100$ a month; rent: $2 \times \$975 = \$1{,}950$
3. GSI: $(\$1{,}950 + \$100) \times 12 = \$24{,}600$
4. Vacancy: $\$24{,}600 \times 0.06 = \$1{,}476$; EGI: $\$24{,}600 - \$1{,}476 = \$23{,}124$
5. In the tool: Monthly rent (all units) 1950, Other income 100, Vacancy 6.

Answer: GSI $24,600 and EGI $23,124. The seller's late fees stay out of the analysis.

PRACTICE

1. Easy In this example, a house rents for $1,600 a month with no other income. What is its gross scheduled income?

   Show answer

   $\$1{,}600 \times 12 = \$19{,}200$. GSI assumes the house is rented every month at market rent.

2. Easy Using the house in problem 1 and an 8% vacancy allowance, find the vacancy allowance and EGI.

   Show answer

   Vacancy $\$19{,}200 \times 0.08 = \$1{,}536$; EGI $\$19{,}200 - \$1{,}536 = \$17{,}664$. EGI is what you can actually expect to collect.

3. Easy In one sentence each, define physical vacancy and economic vacancy.

   Show answer

   Physical vacancy is the share of units (or unit-months) that are empty; economic vacancy is the share of GSI not collected for any reason, including empty units, unpaid rent and concessions.

4. **Medium** In this example, tenants in a neighborhood commonly stay 18 months, and a unit takes a month and a half to clean and re-rent. Estimate the turnover vacancy rate.

   Show answer

   $1.5 \div (18 + 1.5) = 1.5 \div 19.5 \approx 7.7\%$. Shorter stays mean more turnovers and more vacancy.

5. **Medium** In this example, a triplex has three units at $1,100, a laundry that nets $75 a month and two storage lockers rented at $40 each. Find GSI.

   Show answer

   Other income $\$75 + 2 \times \$40 = \$155$; GSI $(\$3{,}300 + \$155) \times 12 = \$41{,}460$.

6. **Medium** A seller's pro forma for a duplex renting for $1,950 total shows no vacancy at all. With a 6% allowance, how much yearly income is the pro forma overstating, and how much is that per month?

   Show answer

   $\$1{,}950 \times 12 \times 0.06 = \$1{,}404$ a year, or $117 a month — money the seller is counting that no landlord actually collects.

7. **Medium** In this example, a fourplex had 3 empty unit-months last year and no other losses. What was its physical vacancy rate?

   Show answer

   $3 \div (4 \times 12) = 3 \div 48 = 6.25\%$. With no credit loss or concessions, economic vacancy is the same here.

8. **Hard** In this example, an owner pays a fourplex's $180 monthly water bill and bills each tenant $40 back. How would you enter this in the Rental worksheet, and why does vacancy apply to the bill-back?

   Show answer

   Enter $160 as Other income and $180 as Owner-paid utilities. Vacancy applies because an empty unit pays no bill-back while the owner still pays the water bill.

9. Hard In this example, the Elm Street house is occupied by a tenant paying $1,850 under a lease with 8 months left; market rent is $2,100. Find first-year scheduled rent and compare it with the $25,200 the worksheet assumes.

Show answer

$1,850 \times 8 + $2,100 \times 4 = $14,800 + $8,400 = $23,200, which is $2,000 less. The lease must run its term, so year one is weaker than the market-rent analysis shows.

10. Hard In this example, a landlord estimates that once every five years a tenant leaves owing two months of $2,100 rent that is never recovered. What credit-loss percent should be added to vacancy?

Show answer

$2 \times $2,100 = $4,200$ every 5 years is $840 a year; $840 \div $25,200 \approx 3.3\%$. Credit loss is real and belongs in the vacancy allowance.

11. Challenge In this example, you can rent the Elm Street house for $2,100 with 6% vacancy or push the rent to $2,250 and expect 10% vacancy. Which produces more EGI, and what else should you weigh?

Show answer

$25,200 \times 0.94 = $23,688$ versus $27,000 \times 0.90 = $24,300$; the higher rent wins by $612. But more vacancy means more turnovers, and each turnover brings cleaning, repairs and advertising costs that can erase the difference.

12. Challenge In this example, a unit near a college rents for $1,200. If its lease ends in May and the next tenant arrives in August, what is that unit's vacancy rate for the year, and how could the landlord fix it?

Show answer

Three empty months: $3 \div 12 = 25\%$. Write leases that end when students arrive (for example, August to July), so turnover falls in the busy season and the unit is rarely empty.

COMMON MISTAKES

- Using the seller's asking rent or pro forma. Estimate rent from three or more comparable rentals and use the typical comp, not the best one.
- Leaving vacancy at zero because the property is rented today. Every tenant eventually leaves; budget a vacancy and credit-loss allowance every year.

- Counting late fees, application fees or security deposits as income. Deposits belong to the tenant and fees are not dependable rent.
- Confusing physical and economic vacancy. A building can be fully occupied and still lose money to unpaid rent and concessions.
- Assuming a below-market lease can be raised immediately. Leases run their term, and state law sets notice periods (and in some states limits) for increases.
- Forgetting that vacancy applies to other income too. An empty unit pays no pet rent, parking fee or bill-back.

Make it a game · Rent Roll Roulette. Each player takes a pretend duplex renting for $1,000 a unit (GSI $24,000). Play twelve rounds, one per month: roll a die for each unit. On a 1 the tenant gives notice and the unit sits empty next month (skip it); on a 2 the tenant pays late but pays; anything else, collect $1,000. A second 1 while a unit is already empty means a tenant left owing a month (subtract $1,000). After twelve months, total what you collected, compute your economic vacancy rate, and compare with 6%. Highest EGI wins — then ask who would have budgeted correctly.

Scripture. "Be thou diligent to know the state of thy flocks, and look well to thy herds. For riches are not for ever: and doth the crown endure to every generation?" (Proverbs 27:23–24, KJV)

A shepherd who knows his flock counts each animal; a landlord who knows his property knows each unit's rent, each lease date and each empty month. Income on paper is not income in hand, and the proverb warns that riches do not last on their own. Diligent knowledge of the real numbers is the first act of stewardship.

3.2 Expenses: The Full List, CapEx and Reserves

OBJECTIVES

- List every operating expense of a small rental and identify costs that are not operating expenses (mortgage principal and interest, depreciation, income tax).
- Estimate property taxes after reassessment and distinguish a landlord (dwelling) insurance quote from a homeowner's policy.
- Build a capital-expenditure budget by component — cost ÷ life ÷ 12 — and convert it to a percent of rent.
- Compute total operating expenses and the expense ratio using the Deal Analyzer's conventions (repairs and CapEx on scheduled rent, management on collected rent).
- Explain the difference between a monthly CapEx allowance and a cash reserve, and size a reserve for one property.

> **Warm-up.** Five minutes. List every bill you think the owner of a rented house has to pay in a year — not the tenant, the owner. Number them. Then star the ones that come every month and circle the ones that come only once every ten or twenty years. Keep the list; you will compare it with the full list in this lesson.

WATCH

5 Mistakes That Create Negative Cash Flow Rentals

Coach Carson · 19:20

https://www.youtube.com/watch?v=o6CAGbpvIGk

> **WHEN TO WATCH**
> Watch 0:34–7:20 (Mistake 1, forgetting expenses, and Mistake 2, old cheap houses) after the fifth core idea. Copy Coach Carson's "wrong" and "right" expense lists into your notebook and match each line to a Deal Analyzer input; the rest of the episode is optional.

BACKUP VIDEO

Calculating Cash Reserves for Rental Properties: How Much Do You Need?

BiggerPockets · 2:29

https://www.youtube.com/watch?v=dF-Tn5pX81Y

A two-minute answer from Brandon Turner on how much to keep in reserves. Watch it with the sixth core idea and write his rule of thumb beside the six-month figure you computed for the Elm Street house.

KEY TERMS

operating expenses

The recurring costs of running a rental property — taxes, insurance, utilities, repairs, capital reserves, management and the like — excluding debt service, depreciation and income tax.

capital expenditure (CapEx)

Money spent to replace or improve a major component with a long life, such as a roof, furnace or flooring.

CapEx reserve

A monthly or annual amount set aside from rent so that cash is on hand when long-lived components wear out.

useful life

The number of years a building component can be expected to last before it must be replaced.

repairs and maintenance

Routine fixes and upkeep that keep a property in working order without replacing a major component.

reassessment

The county assessor's revaluation of a property, often triggered or updated by a sale, that changes its property-tax bill.

landlord (dwelling) policy

Property insurance written for a home rented to others, covering the building, liability and often lost rent, rather than the owner's personal belongings.

property management fee

The fee a manager charges to run a rental, commonly a percent of rent collected plus leasing and other fees.

expense ratio

Total operating expenses divided by gross income; a quick measure of how much of a property's income its upkeep consumes.

cash reserve

Money held in a separate account for a property's large or unexpected costs and for months without rent.

turnover costs

The cleaning, painting, repairs, advertising and screening costs of preparing a unit for a new tenant.

CORE IDEAS

The story. In 1209, after more than thirty years of work, London finished a stone bridge across the Thames. It was lined with houses and shops, and from the start it had to pay for its own upkeep. Rents from the buildings on the bridge, tolls from carts and ships, and gifts from Londoners flowed into a fund called the **Bridge House**, and in 1282 a royal charter formally established it to keep London Bridge in repair. Its keepers, the bridge wardens, paid masons and carpenters year after year, because the river never stopped working on the piers and arches. They also did something wiser: they invested the surplus in more property, so the fund grew. Centuries later that same fund replaced London Bridge, built Blackfriars Bridge, and paid for Tower Bridge, opened in 1894. A structure that would certainly need repair was matched, from the beginning, with an income set aside to repair it.

How they figured it out. The bridge wardens learned what every owner of a building learns: upkeep comes in two kinds. Some is routine — a loose stone, a broken step, a leaking gutter — and arrives every year. Some is rare and enormous — a new span, a new roof — and arrives once a generation, but it always arrives. Benjamin Franklin put the first lesson into a sentence in *The Way to Wealth* (1758): "Beware of little expences; a small leak will sink a great ship." Accountants and appraisers later turned the second into a rule, separating **operating expenses** — the bills of running a property — from **capital expenditures**, the large replacements a building needs every decade or two, and listing **reserves for replacement** as a line in commercial income statements. The small investor's CapEx reserve, popularized by practitioners such as Brandon Turner at BiggerPockets, is the Bridge House in miniature: you cannot know when the roof will fail, but you know it will.

The big idea. Operating expenses are every recurring cost of running the property, whoever writes the check. The Deal Analyzer's rule is $\text{OpEx} = \text{taxes} + \text{insurance} + 12 \times (\text{HOA} + \text{utilities} + \text{other}) + \text{GSI} \times (\text{repairs}\,\% + \text{CapEx}\,\%) + \text{EGI} \times \text{management}\,\%$. Repairs and CapEx are figured on scheduled rent because a building wears out whether or not a unit is rented; management is figured on collected rent because managers are paid on what they collect. In this example, the Elm Street house has taxes of $2,800, insurance of $1,300, repairs at 6% ($1,512), CapEx at 7% ($1,764) and management at 9% of EGI ($2,131.92): $9,507.92 a year, or about 37.7% of gross income. What is *not* an operating expense matters just as much: the mortgage payment, depreciation and income tax are all left out.

Here is the full list to check on every deal. **Property taxes**: use the bill *after* **reassessment**, not the seller's; many counties revalue a property at its sale price. **Insurance**: get a **landlord (dwelling) policy** quote, which covers the building, liability and often lost rent, not a homeowner's policy. **HOA dues**, if any. **Owner-paid utilities**: water, sewer, garbage, common-area electric. **Repairs and maintenance**: leaky faucets, broken latches, the clogged drain. **CapEx**. **Property management**: commonly 8–10% of collected rent plus leasing fees in many markets (an example; get local quotes) — count it even if you manage yourself, because your time is worth something and you may not always be able to. **Other**: lawn care and snow removal, pest control, bookkeeping and tax preparation, legal fees, advertising and screening, and **turnover costs** such as cleaning, paint and rekeying between tenants.

CapEx by component is the most honest way to budget the big replacements. For each major component, divide its replacement cost by its **useful life** to get a yearly amount, then by 12 for a monthly reserve. In this example, for the Elm Street house: roof $\$10{,}500 \div 25 = \$420$ a year; furnace $\$7{,}200 \div 18 = \$400$; water heater $\$1{,}560 \div 12 = \$130$; flooring $\$4{,}800 \div 10 = \$480$; appliances $\$2{,}880 \div 12 = \$240$; paint inside and out $\$4{,}000 \div 8 = \$500$. The total is $2,170 a year, about $181 a month, or 8.6% of the $2,100 rent — a bit above the tool's 7% default. Ages matter: a 20-year-old roof will need its whole cost soon. And "the roof is new, so CapEx is zero" is wrong: a new roof still wears out one-twenty-fifth every year, and the furnace, water heater, floors and appliances keep aging regardless.

A CapEx *allowance* in the worksheet is not the same as cash in the bank. Components do not fail on schedule; the furnace can die in the first winter. That is why careful investors also hold a **cash reserve** for each property in a separate account — commonly several months of operating expenses and mortgage payments, and more for older buildings (these are example guidelines, not rules). In this example, six months of the Elm Street house's operating expenses and debt service is about $(\$9{,}507.92 + \$14{,}969.31) \div 2 = \$12{,}238.62$. Add the reserve to the cash a deal requires before you call it affordable. A quick reality check is the **expense ratio**, operating expenses divided by gross income: small rentals commonly run about 35–50% once every cost is honestly counted, and older or cheaper houses often run higher. An analysis showing 20% has almost certainly left something out.

Run the numbers. The Rental worksheet's Operating expenses section has eight inputs: Property taxes, Insurance, HOA dues, Owner-paid utilities, Repairs & maintenance %, CapEx %, Property management % and Other expenses. Put lawn, snow, pest control and bookkeeping in Other; put a CapEx figure from your component table into CapEx % by dividing the monthly reserve by the monthly rent. The tool prints an expense table and the expense ratio so you can see whether your total is believable. A careful investor checks the tax rate with the county, gets a real dwelling-policy quote, and asks the age of the roof, furnace and water heater. The classic mistakes: leaving CapEx at zero because the roof is new; using the seller's old tax bill; using a homeowner's insurance quote; setting management to zero because "I'll do it myself"; and putting the mortgage payment in expenses (it belongs in debt service, Lesson 3.3). Other investors and tools use slightly different conventions —

management on scheduled rent, CapEx as a dollar figure — and that is fine, as long as you use one convention consistently on every deal you compare.

PICTURE STUDY



Thatchers Mending a Roof in a Dune Landscape, Anthonie Jansz. van der Croos, 17th century (before 1662) · Oil painting · Private collection (sold at Christie's)

Image: Wikimedia Commons, public domain

Anthonie Jansz. van der Croos (about 1606–1662) was a Dutch landscape painter who worked in The Hague and painted the dunes, trees and villages of Holland. Here the grand trees take up most of the canvas, and the people are tiny — but look closely and you will find the reason for the title: men on the roof of a humble hut, mending the thatch before the next storm. It opens this lesson because every roof, thatched or shingled, wears out on a schedule, and the owner who sets aside a little each year is ready when the work must be done.

Look closely

- Find the two men on the roof. What tools or materials can you make out, and what are they doing?
- Look at the old, leaning trees over the hut. What risk might they pose to the roof, and what upkeep might they require?
- Notice the two figures resting at the right. Who do you think they are, and why might they be watching?
- Compare the size of the hut with the size of the trees and sky. What does the painter seem to think is important?

Talk about it

1. A thatched roof might last twenty or thirty years. If you owned this hut, how would you plan for the day the whole roof must be replaced?
2. Why do “little expenses” like a small leak become large ones when they are ignored?
3. Proverbs praises the ant that prepares in summer for winter. How is a CapEx reserve an act of diligence and humility rather than worry?

PROJECT

The Expense Build and CapEx Table

You will build the full expense side of the same listing you used in Lesson 3.1. You will look up the real tax rate, estimate insurance, list every operating expense, and build a component-by-component CapEx table from the listing's photos and description. Then you will enter it all in the Rental worksheet and see how your honest numbers compare with the tool's defaults. Contact no insurer, manager or seller except with a parent present and permission; public sources are enough.

You will need

- Your Lesson 3.1 Income Sheet and listing
- The county assessor's or treasurer's website (tax rate and the property's current assessment)
- A spreadsheet or graph paper for the CapEx table
- The School Launch Deal Analyzer (Rental worksheet) and your deal binder

Steps

1. Find the property's current assessed value and tax bill, compute the tax rate, and estimate the bill after a sale at the list price.
2. Estimate a landlord-policy premium (ask a parent what your family's homeowner's policy costs and add a margin, or use a written quote obtained with a parent) and write how you chose the number.
3. List every other operating expense on the full list in this lesson, writing a yearly dollar amount or a percent for each, even if it is zero.
4. Build a CapEx table with columns: component, estimated age, replacement cost, useful life, yearly amount, monthly amount. Include at least roof, furnace or heat pump, water heater, flooring, appliances and paint.
5. Convert the monthly CapEx total to a percent of rent and compare it with the tool's 7% default.

6. Enter taxes, insurance, utilities, other expenses, repairs %, CapEx % and management % in the Rental worksheet, and record the operating-expense total and expense ratio it shows.
7. Print the worksheet and file it with a one-paragraph verdict: are this property's expenses ordinary, heavy or light for its rent, and which single expense worries you most?

INVESTOR'S NOTEBOOK

1. Flashcards for operating expenses, CapEx, CapEx reserve, useful life, repairs and maintenance, reassessment, landlord policy, management fee, expense ratio, cash reserve and turnover costs.
2. Draw a CapEx table for an imaginary house with six components and a bar chart of their yearly amounts. Shade the component closest to the end of its life.
3. Trap list titled "Not an operating expense": mortgage principal and interest, depreciation, income tax, the down payment, upfront repairs. Then a second list: "Never zero": CapEx, management, vacancy.

KEY FORMULAS

$$\text{OpEx} = \text{taxes} + \text{insurance} + 12(\text{HOA} + \text{utilities} + \text{other}) + \text{GSI}(\text{repairs \%} + \text{CapEx \%}) + \text{EGI} \times \text{mgmt \%}$$

$$\text{Component reserve per month} = \text{replacement cost} \div \text{useful life (years)} \div 12$$

$$\text{CapEx \%} = \frac{\text{total monthly reserve}}{\text{monthly rent}}$$

$$\text{Expense ratio} = \frac{\text{operating expenses}}{\text{GSI}}$$

$$\text{Property tax after sale} \approx \text{new assessed value} \times \text{tax rate}$$

From history. The Bridge House fund still exists. Its legal name is still Bridge House Estates, it now works under the name City Bridge Foundation with the City of London Corporation as its sole trustee, and it still maintains the City's Thames bridges, including Tower Bridge. Its reserves grew so large that since 1995 its surplus income has been given to charitable work across London; in 2019 its total funds exceeded £1.5 billion. A repair fund kept faithfully for seven centuries became a gift to its neighbors.

WORKED EXAMPLES

Example 1. In this example, the Elm Street house (rent $2,100, 6% vacancy) has taxes of $2,800 and insurance of $1,300 a year, repairs 6%, CapEx 7% and management 9%. Build the operating-expense total, the monthly figure and the expense ratio exactly as the Rental worksheet does.

Show solution

1. From Lesson 3.1: GSI $= \$25{,}200$, EGI $= \$23{,}688$
2. Repairs and CapEx on GSI: $\$25{,}200 \times 0.06 = \$1{,}512$; $\$25{,}200 \times 0.07 = \$1{,}764$
3. Management on EGI: $\$23{,}688 \times 0.09 = \$2{,}131.92$
4. Total: $\$2{,}800 + \$1{,}300 + \$1{,}512 + \$1{,}764 + \$2{,}131.92 = \$9{,}507.92$, or $\$792.33$ a month
5. Expense ratio: $\$9{,}507.92 \div \$25{,}200 \approx 37.7\%$

Answer: Operating expenses are $9,507.92 a year ($792.33 a month), 37.7% of gross income — the same total the tool's expense table shows.

Example 2. In this example, the Elm Street house has a roof costing $10,500 (25-year life), a furnace $7,200 (18), a water heater $1,560 (12), flooring $4,800 (10), appliances $2,880 (12) and paint $4,000 (8). Build the CapEx budget, convert it to a percent of the $2,100 rent, and find how much it changes annual cash flow compared with the 7% default.

Show solution

1. Yearly amounts: $\$420 + \$400 + \$130 + \$480 + \$240 + \$500 = \$2{,}170$
2. Monthly reserve: $\$2{,}170 \div 12 = \$180.83$
3. Percent of rent: $\$180.83 \div \$2{,}100 \approx 8.6\%$ — round up to 9% in the tool
4. At 9%: $\$25{,}200 \times 0.09 = \$2{,}268$; at 7%: $\$1{,}764$; difference $504 a year

Answer: The component budget is about $181 a month (8.6% of rent). Entering 9% instead of 7% lowers annual cash flow by $504, or $42 a month.

Example 3. In this example, the Elm Street seller's tax bill is $1,904, based on an assessed value of $170,000. The county reassesses at the sale price, and you will pay $250,000. Estimate the new tax bill and its effect on monthly cash flow.

Show solution

1. Tax rate: $\$1{,}904 \div \$170{,}000 = 0.0112 = 1.12\%$
2. New bill: $\$250{,}000 \times 0.0112 = \$2{,}800$
3. Increase: $\$2{,}800 - \$1{,}904 = \$896$ a year, or $\$896 \div 12 \approx \$74.67$ a month

Answer: Budget $2,800, not $1,904. Using the seller's bill would overstate cash flow by about $75 a month. Reassessment rules differ by state — check your county assessor.

PRACTICE

1. Easy Which of these are operating expenses: mortgage principal and interest, property taxes, landlord insurance, depreciation, CapEx reserve, the owner's income tax?

   Show answer

   Property taxes, landlord insurance and the CapEx reserve. The mortgage is debt service, depreciation is a tax deduction (Unit 9), and income tax is the owner's, not the property's.

2. Easy In this example, rent is $1,800 a month and repairs are budgeted at 6% of scheduled rent. What is the annual and the monthly repair budget?

   Show answer

   $\$1{,}800 \times 12 \times 0.06 = \$1{,}296$ a year, or $108 a month.

3. Easy In this example, GSI is $21,600 and vacancy is 5%. Using the Deal Analyzer's convention, what is a 9% management fee?

   Show answer

   EGI $\$21{,}600 \times 0.95 = \$20{,}520$; management $\$20{,}520 \times 0.09 = \$1{,}846.80$. Management is figured on collected rent.

4. Medium In this example, a water heater costs $1,500 to replace and lasts 12 years. What should you reserve each month?

Show answer

$1,500 ÷ 12 ÷ 12 ≈ $10.42 a month — small, but it adds up across every component.

5. Medium In this example, a roof costs $14,400 and lasts 24 years, and rent is $1,600. What is the monthly roof reserve and its percent of rent?

Show answer

$14,400 ÷ 24 = $600 a year, $50 a month; $50 ÷ $1,600 ≈ 3.1% of rent for the roof alone.

6. Medium In this example, a rental's operating expenses are $8,400 and its GSI is $21,600. Find the expense ratio and say whether it looks believable.

Show answer

$8,400 ÷ $21,600 ≈ 38.9%. That falls within the common 35–50% range for small rentals, so it is plausible — but still check each line.

7. Medium In this example, a house sells for $300,000 in a county with a 1.05% tax rate; the seller's bill was $2,250. Estimate the new bill and the monthly difference.

Show answer

$300,000 × 0.0105 = $3,150; increase $900 a year, or $75 a month that the seller's numbers hide.

8. Hard You plan to manage the Elm Street house yourself and want to set management to 0%. How much does that raise monthly cash flow on the worksheet, and why do careful investors keep it in?

Show answer

Management is $23,688 × 0.09 = $2,131.92 a year, about $177.66 a month. Keep it in: your time has value, and if you move, fall ill or grow busy, you will need to pay a manager and the deal must still work.

9. Hard The Elm Street seller says, “The roof is brand new, so you can leave CapEx at zero.” On the worksheet, how much better does monthly cash flow look with CapEx at 0% instead of 7%, and why is the seller wrong?

Show answer

CapEx at 7% is $1,764 a year, $147 a month, so cash flow would look like $-\$65.77 + \$147 = +\$81.23$ a month. The new roof still wears out each year, and the furnace, water heater, floors and appliances keep aging.

10. Hard Size a six-month cash reserve for the Elm Street house, using operating expenses of $9,507.92 and debt service of $14,969.31 a year.

Show answer

$(\$9{,}507.92 + \$14{,}969.31) \div 12 \times 6 = \$12{,}238.62$. That cash is in addition to the down payment and closing costs.

11. Challenge In this example, a duplex renting for $1,950 has a roof $12,000 (25 years), two furnaces at $6,000 (20), two water heaters at $1,400 (12), flooring $8,000 (10), two appliance sets at $2,500 (12) and paint $5,000 (7). Find the monthly CapEx reserve and its percent of rent.

Show answer

Yearly: $\$480 + \$600 + \$233.33 + \$800 + \$416.67 + \$714.29 = \$3{,}244.29$; monthly $270.36; $\$270.36 \div \$1{,}950 \approx 13.9\%$. Two of everything makes duplex CapEx heavier than many beginners expect.

12. Challenge Another calculator figures management on scheduled rent instead of collected rent. For the Elm Street house at 9%, how much different is the management line, and what does that teach about comparing tools?

Show answer

On GSI: $\$25{,}200 \times 0.09 = \$2{,}268$; on EGI: $2,131.92; difference $136.08 a year. Small conventions change results, so compare deals using one tool and one set of conventions.

COMMON MISTAKES

- Leaving CapEx at zero because the roof is new. Every component wears out every year; budget CapEx on every property.
- Using the seller’s current tax bill. Estimate taxes after reassessment at your purchase price, using the county’s rate and rules.

- Using a homeowner's insurance quote for a rental. Get a landlord (dwelling) policy quote with liability and loss-of-rent coverage.
- Setting management to zero because you will self-manage. Count it; your time is worth something and the deal must survive hiring a manager.
- Putting the mortgage payment in operating expenses. Debt service is subtracted after NOI, never inside it.
- Treating the CapEx allowance as if it were money in the bank. Hold a separate cash reserve as well, because components fail on their own schedule.

Make it a game · The CapEx Auction. Make six cards: Roof $10,500/25 yrs, Furnace $7,200/18, Water heater $1,560/12, Flooring $4,800/10, Appliances $2,880/12, Paint $4,000/8. Each player starts with $300 of play money a month to set aside. The leader shows a card; players secretly write the monthly reserve they would bid for it (cost ÷ life ÷ 12). Closest to the true figure wins the card and keeps that amount; anyone over by more than $10 pays $5 to the bank. After all six cards, total each player's reserves and compare with $180.83. Then roll a die: on a 1 or 2 the furnace fails this year — does your reserve cover it?

Scripture. "Go to the ant, thou sluggard; consider her ways, and be wise: Which having no guide, overseer, or ruler, Provideth her meat in the summer, and gathereth her food in the harvest." (Proverbs 6:6–8, KJV)

The ant does not wait for winter to begin gathering; she stores up while the season is good. A CapEx reserve and a cash reserve are the landlord's summer gathering, set aside before the roof or furnace demands them. No one forces a small investor to save — like the ant, he must choose diligence on his own.

3.3 NOI, Cash Flow, Cap Rate and Cash-on-Cash

OBJECTIVES

- Compute net operating income, annual debt service and cash flow for a rental using the Deal Analyzer's conventions.
- Compute and interpret cap rate, cash-on-cash return and debt service coverage ratio, and explain what each one measures.
- Compute the gross rent multiplier, expense ratio and break-even occupancy, and use them as quick checks.
- Explain positive and negative leverage by comparing a property's cap rate with its loan constant.
- Distinguish cash-on-cash return from total return and return on equity, and identify which parts of total return are uncertain.

> **Warm-up.** Five minutes. Your uncle offers to sell you a vending machine for $2,000 that earns $300 a year after paying for snacks and repairs. Write the percent it earns on its price. Now suppose you borrow $1,500 of the price and pay the bank $200 a year. Write what you earn on the $500 of your own money. Which number is the machine's return, and which is yours?

WATCH

Calculating Numbers on a Rental Property [Using The Four Square Method!]

BiggerPockets · 23:00

https://www.youtube.com/watch?v=T_7vhsSBi7c

> **WHEN TO WATCH**
> Watch the whole whiteboard lesson after the third core idea. Draw Brandon Turner's four squares — income, expenses, cash flow, cash-on-cash — in your notebook and fill them with the Elm Street numbers as he fills them with his.

BACKUP VIDEO

The Difference Between Cash On Cash And Cap Rate

Jeremy Mercer · 4:24

https://www.youtube.com/watch?v=yOhjQs0lUDc

A four-minute contrast of cap rate and cash-on-cash. Watch before the practice set and write one sentence explaining why the same property can have a 7% cap rate and a 3% cash-on-cash return.

KEY TERMS

net operating income (NOI)

Effective gross income minus operating expenses, before any mortgage payment, depreciation or income tax.

cash flow

Net operating income minus debt service; the money left for the owner each year.

cash-on-cash return

Annual cash flow divided by the total cash the investor put in (down payment, closing costs and upfront repairs).

debt service

The total yearly mortgage payments of principal and interest (plus mortgage insurance, in the Deal Analyzer).

capitalization rate (cap rate)

NOI divided by price or value; the property's yearly return as if bought for cash.

debt service coverage ratio (DSCR)

NOI divided by annual debt service; how many times the property's income covers its loan payments.

gross rent multiplier (GRM)

Price divided by annual gross rent; a quick comparison of price to income.

break-even occupancy

Operating expenses plus debt service divided by gross scheduled income; the share of income a property must collect to pay all its bills.

loan constant

Annual debt service divided by the loan amount; the yearly cost of each borrowed dollar, principal and interest together.

leverage

Using borrowed money to buy an asset, which magnifies returns on the owner's cash in both directions.

total return

Cash flow plus principal paydown plus appreciation (and tax effects) over a period, before selling costs.

return on equity (ROE)

Annual cash flow (or total return) divided by the owner's current equity in the property.

CORE IDEAS

The story. In 1776 the Scottish philosopher Adam Smith published *The Wealth of Nations,* and in a chapter about lending at interest he described how English land was priced. Land was not quoted in pounds per acre but in **"years' purchase"** — so many years of its yearly rent. "When interest was at ten per cent.," Smith wrote, "land was commonly sold for ten or twelve years purchase. As interest sunk to six, five, and four per cent. the price of land rose to twenty, five-and-twenty, and thirty years purchase." Turn that around and you have a modern idea. Land bought at twenty years' purchase returns one-twentieth of its price each year in rent: five percent. Smith had noticed what every investor still sees — the return buyers demand from property rises and falls with the cost of borrowing money.

How they figured it out. Smith's "years' purchase" is the ancestor of two measures in your worksheet. Inverted, it is the **capitalization rate**: the yearly net income divided by the price. Kept upright, it resembles the gross rent multiplier: the price divided by the yearly rent. In 1906 the American economist Irving Fisher, in *The Nature of Capital and Income*, explained why these ratios work: the value of any capital — a farm, a house, a bond — is the present worth of the income it will produce. Appraisers built the income approach on that idea, and lenders added a question of

their own. A bank does not care what return the owner earns; it cares whether the property's income will cover the loan payments with room to spare. That question became the **debt service coverage ratio**. Each measure answers a different question, and a careful investor uses all of them.

The big idea. Subtract operating expenses from effective gross income and you have **net operating income (NOI)**, the property's earnings before any loan. Subtract the year's mortgage payments, the **debt service**, and you have **cash flow**, the owner's money. Two ratios follow. The **cap rate**, NOI ÷ price, is the property's return as if you paid cash. **Cash-on-cash return**, cash flow ÷ cash invested, is *your* return on the down payment, closing costs and upfront repairs. In this example, the Elm Street house has NOI of $14,180.08 on a $250,000 price — a 5.67% cap rate. With 25% down and a 7% thirty-year loan of $187,500, debt service is $14,969.31 a year, so cash flow is −$789.23 (about −$66 a month) and cash-on-cash is −1.09% on $72,500 invested.

Four more measures round out the analysis. The **debt service coverage ratio**, NOI ÷ debt service, tells a lender how safely the income covers the loan; many lenders commonly want 1.20 to 1.25 or more (an example; it varies), and Elm Street's is $14,180.08 ÷ $14,969.31 = 0.95 — the income does not even cover the payment. The **gross rent multiplier**, price ÷ annual rent, is a fast comparison between similar properties: $250,000 ÷ $25,200 = 9.9. The **expense ratio** from Lesson 3.2 is 37.7%. And **break-even occupancy**, (OpEx + debt service) ÷ GSI, shows how full the property must be to pay every bill: ($9,507.92 + $14,969.31) ÷ $25,200 = 97.1%. A house that must be rented 97% of the year just to break even has almost no margin for error.

What do cap rates say? A higher cap rate means more income per dollar of price, but it usually comes with more risk: older buildings, weaker neighborhoods, slower appreciation or more management. Lower cap rates are common where demand is strong and buyers expect appreciation. Cap rates also explain **leverage**. Every loan has a **loan constant** — its yearly payment per dollar borrowed. A 7% thirty-year loan costs about 7.98% a year. When a property's cap rate is above the loan constant, borrowing raises your cash-on-cash return (**positive leverage**); when it is below, borrowing lowers it (**negative leverage**). Elm Street's 5.67% cap rate is well below 7.98%, which is exactly why its cash-on-cash is negative. Cap rates also let you value income: in this example, if similar houses trade at a 6.5% cap rate, Elm Street's NOI supports a value of about $14,180.08 ÷ 0.065 ≈ $218,155.

Cash-on-cash is not the whole story, and total return is not a promise. **Total return** adds cash flow, **principal paydown** (the part of each payment that reduces the loan) and appreciation. In this example, Elm Street's first year shows −$789.23 of cash flow, about $1,904.64 of principal paydown and, at an assumed 3% appreciation, $7,500 of value growth: $8,615.41, or 11.9% on the cash invested. But change appreciation to 0% and the total falls to $1,115.41. Appreciation is never guaranteed, and it cannot pay the mortgage. As years pass, introduce one more ratio, **return on equity**: cash flow divided by the equity you now hold. When equity grows large and cash flow stays small, ROE shrinks — a signal to ask, in Unit 10, whether that equity is working well or whether paying down debt or selling would serve you better.

Run the numbers. The Rental worksheet puts four cards at the top — **Monthly cash flow**, **Cash-on-cash return**, **Cap rate** and **DSCR** — and lists NOI, debt service, GRM and break-even occupancy in the table below. Its 30-year projection shows total return year by year; set Appreciation to 0% and see what the deal is without it. A careful investor reads the cards in order: Is NOI positive and believable? Does DSCR clear the lender's minimum? Is cash flow positive after every expense? Is cash-on-cash worth the risk compared with simply paying down debt? The classic mistakes: putting the mortgage inside operating expenses (so NOI is wrong); computing cap rate on the asking price instead of your price; leaving closing costs and upfront repairs out of cash invested; computing DSCR on gross rent instead of NOI; and counting appreciation as cash flow. Remember that cash flow, cash-on-cash and DSCR depend on the loan; NOI and cap rate do not.

PICTURE STUDY



Mr and Mrs Andrews, Thomas Gainsborough, c. 1750 · Oil on canvas · The National Gallery, London

Image: Wikimedia Commons, public domain

Thomas Gainsborough (1727–1788) painted this portrait in his early twenties, soon after Robert Andrews married Frances Carter. Unusually, he gave half the canvas to the land itself — the couple's estate, the Auberies, near Sudbury on the border of Suffolk and Essex, with its harvested wheat and grazing sheep. In Gainsborough's England such an estate was valued by its rents, quoted in "years' purchase" exactly as Adam Smith described. This painting opens the lesson because it shows what the numbers measure: land and buildings matter to an investor for the income they produce year after year.

Look closely

- Look at the right half of the painting. What sources of income can you find on this estate?
- Find the sheaves of wheat. What season is it, and why might a painter show the harvest just gathered?
- Notice how the couple is placed to one side so the land can be seen. What does that suggest about how they valued it?
- Compare the neat fields and fences with the wild trees. What work and expense would it take to keep the estate looking like this?

Talk about it

1. If this estate rented for £200 a year and sold at twenty years’ purchase, what would it cost, and what “cap rate” would that be?
2. Why would a buyer demand more years’ purchase when interest rates fall, and fewer when they rise?
3. The parable of the talents praises servants who put their master’s money to productive work. How is measuring a property’s return honestly part of faithful stewardship rather than mere greed?

PROJECT

Four Squares and a Verdict

Now you finish the first complete analysis of your Lesson 3.1 listing. With income (3.1) and expenses (3.2) already built, you will add a pretend loan, compute NOI, cash flow, cap rate, cash-on-cash, DSCR, GRM and break-even occupancy by hand, check every number in the Rental worksheet, and write your first verdict. The purchase and the loan are pretend; use an example rate from a public survey of average mortgage rates, and contact no lender except with a parent present and permission.

You will need

- Your Income Sheet and Expense Build from Lessons 3.1 and 3.2
- An example investment-loan rate (a published weekly average plus about half a point to a point, labeled as an example)
- A calculator and the School Launch Deal Analyzer (Rental worksheet)
- Your deal binder

Steps

1. Draw four large squares on one page labeled Income, Expenses, Cash Flow and Cash-on-Cash, as in the video.
2. Fill Income and Expenses from your earlier sheets and compute NOI.
3. Choose a down payment (25% is the tool's default) and rate, compute the loan and monthly P&I with the payment formula, and find annual debt service.
4. Compute cash flow, cash invested (down payment, closing costs, upfront repairs) and cash-on-cash in the last two squares.
5. Below the squares, compute cap rate, DSCR, GRM and break-even occupancy by hand.
6. Enter everything in the Rental worksheet, compare each result with yours, and correct any difference until they agree to the dollar.
7. Print the worksheet and write a one-paragraph verdict — buy, negotiate to a stated price, or walk away — citing at least three of the measures. File it in

your deal binder.

INVESTOR'S NOTEBOOK

1. Flashcards for NOI, debt service, cash flow, cap rate, cash-on-cash, DSCR, GRM, break-even occupancy, loan constant, leverage, total return and ROE — formula on the back with the Elm Street value.
2. Draw a staircase: GSI → (minus vacancy) EGI → (minus OpEx) NOI → (minus debt service) Cash flow. Beside NOI write "cap rate lives here"; beside cash flow write "cash-on-cash lives here."
3. Trap list: mortgage inside OpEx; cap rate on asking price; cash invested without closing and repairs; DSCR on gross rent; appreciation counted as cash flow.

KEY FORMULAS

$$\text{NOI} = \text{EGI} - \text{operating expenses}$$

$$\text{Debt service} = 12 \times (\text{P\&I} + \text{mortgage insurance}) \qquad \text{Cash flow} = \text{NOI} - \text{debt service}$$

$$\text{Cap rate} = \frac{\text{NOI}}{\text{price}} \qquad \text{Value} = \frac{\text{NOI}}{\text{cap rate}}$$

$$\text{Cash-on-cash} = \frac{\text{annual cash flow}}{\text{down payment} + \text{closing costs} + \text{upfront repairs}}$$

$$\text{DSCR} = \frac{\text{NOI}}{\text{debt service}} \qquad \text{GRM} = \frac{\text{price}}{\text{annual gross rent}}$$

$$\text{Break-even occupancy} = \frac{\text{operating expenses} + \text{debt service}}{\text{GSI}}$$

$$\text{Monthly P\&I} = L \cdot \frac{r}{1 - (1+r)^{-n}}, \quad r = \tfrac{\text{annual rate}}{12}, \; n = 12 \times \text{years}$$

From history. "Years' purchase" survived in British property sales for centuries, and the phrase still appears in English and Irish legal and valuation writing. Smith even used it to compare countries: land, he wrote, commonly sold at thirty years' purchase in England but twenty in France, where interest rates were higher. Two hundred and fifty years later, investors compare cap rates between cities for exactly the same reason.

Example 1. In this example, the Elm Street house costs $250,000 with $5,000 closing costs and $5,000 upfront repairs; 25% down; 7% for 30 years. EGI is $23,688 and operating expenses are $9,507.92. Find NOI, debt service, cash flow, cap rate, cash-on-cash and DSCR.

Show solution

1. NOI: $\$23{,}688 - \$9{,}507.92 = \$14{,}180.08$
2. Loan $\$250{,}000 \times 0.75 = \$187{,}500$; with $r = 0.07/12,\ n = 360$, P&I $= \$1{,}247.44$; debt service $\$1{,}247.44 \times 12 = \$14{,}969.31$
3. Cash flow: $\$14{,}180.08 - \$14{,}969.31 = -\$789.23$ a year ($-\$65.77$ a month)
4. Cash invested: $\$62{,}500 + \$5{,}000 + \$5{,}000 = \$72{,}500$; cash-on-cash $-\$789.23 \div \$72{,}500 = -1.09\%$
5. Cap rate $\$14{,}180.08 \div \$250{,}000 = 5.67\%$; DSCR $\$14{,}180.08 \div \$14{,}969.31 = 0.95$

Answer: The house loses about $66 a month: cap rate 5.67%, cash-on-cash −1.09%, DSCR 0.95. These are the Rental worksheet's starting results — a realistic deal that does not work at this price.

Example 2. In this example, the Cedar Avenue duplex costs $180,000 (closing $4,000, repairs $6,000, 25% down, 7%, 30 years). It rents for $1,950 total with 6% vacancy; taxes $2,160, insurance $1,250, owner-paid water and garbage $90 a month, repairs 6%, CapEx 7%, management 9%. Run the full analysis.

Show solution

1. GSI $23,400; EGI $23,400 $\times$ 0.94 = $21,996
2. OpEx: $2,160 + $1,250 + $1,080 + $1,404 + $1,638 + $1,979.64 = $9,511.64; NOI $12,484.36
3. Loan $135,000; P&I $898.16; debt service $10,777.90
4. Cash flow $12,484.36 − $10,777.90 = $1,706.46 ($142.21 a month); cash invested $45,000 + $4,000 + $6,000 = $55,000
5. Cash-on-cash 3.10%; cap rate $12,484.36 ÷ $180,000 = 6.94%; DSCR 1.16

Answer: About $142 a month of cash flow, 3.1% cash-on-cash, a 6.94% cap rate and DSCR 1.16 — positive, but thin, and below many lenders' 1.20–1.25 comfort level. In the Rental worksheet: Purchase price 180000, Buyer closing costs 4000, Upfront repairs 6000, Monthly rent 1950, Property taxes 2160, Insurance 1250, Owner-paid utilities 90.

Example 3. Using the Elm Street numbers, compute the GRM and break-even occupancy, estimate value at a 6.5% market cap rate, and find first-year total return with 3% appreciation and with 0%.

Show solution

1. GRM: $250,000 ÷ $25,200 = 9.9
2. Break-even occupancy: ($9,507.92 + $14,969.31) ÷ $25,200 = 97.1%
3. Value at 6.5%: $14,180.08 ÷ 0.065 ≈ $218,155
4. Year-1 principal paydown: $187,500 − $185,595.36 = $1,904.64
5. Total return at 3%: −$789.23 + $1,904.64 + $7,500 = $8,615.41 (11.9% of $72,500); at 0%: $1,115.41 (1.5%)

Answer: GRM 9.9, break-even 97.1%, income value about $218,000. Most of the year-one total return is assumed appreciation, which may never come — the tool's projection shows the same $8,615 in year 1.

PRACTICE

1. Easy In this example, a rental has EGI of $30,000 and operating expenses of $12,000. What is its NOI?

   Show answer

   $30,000 − $12,000 = $18,000. No mortgage payment is subtracted to find NOI.

2. Easy Using the property in problem 1 and a price of $300,000, what is the cap rate?

   Show answer

   $18,000 ÷ $300,000 = 6.0%. The cap rate ignores financing.

3. Easy In this example, NOI is $18,000 and debt service is $15,000. Find the annual and monthly cash flow and the DSCR.

   Show answer

   Cash flow $3,000 a year, $250 a month; DSCR $18,000 ÷ $15,000 = 1.20.

4. Medium In this example, an investor puts $60,000 down, pays $6,000 in closing costs and $4,000 in upfront repairs, and the property cash-flows $3,500 a year. What is the cash-on-cash return?

   Show answer

   Cash invested $70,000; $3,500 ÷ $70,000 = 5.0%. Leaving out closing and repairs would wrongly show 5.8%.

5. Medium In this example, a duplex is priced at $280,000 and rents for $2,400 a month. Find its GRM and explain what it is good for.

   Show answer

   $280,000 ÷ ($2,400 × 12) = $280,000 ÷ $28,800 ≈ 9.7. GRM quickly compares the prices of similar properties to their rents, but it ignores expenses.

6. Medium In this example, operating expenses are $11,000, debt service is $13,000 and GSI is $30,000. Find break-even occupancy and interpret it.

   Show answer

   ($11,000 + $13,000) ÷ $30,000 = 80%. The property pays every bill if it collects at least 80% of scheduled income — a healthier margin than Elm Street's 97%.

7. Medium In this example, similar small apartment buildings sell at a 7% cap rate, and a building's honest NOI is $42,000. What value does its income support? What if the seller asks $700,000?

Show answer

$42,000 \div 0.07 = $600,000. At $700,000 the buyer would get a $42,000 \div $700,000 = 6.0% cap rate — paying for income the building does not produce.

8. Hard A 7% thirty-year loan has a loan constant of about 7.98%. A property's cap rate is 6.0%. Is this positive or negative leverage, and what happens to cash-on-cash as you borrow more?

Show answer

Negative leverage: each borrowed dollar costs 7.98% a year but earns only 6.0%, so borrowing more lowers cash-on-cash. Positive leverage needs a cap rate above the loan constant.

9. Hard In this example, a lender requires a DSCR of at least 1.25, and a property's NOI is $20,000. What is the most annual debt service the lender will allow, and how much is that per month?

Show answer

$20,000 \div 1.25 = $16,000 a year, about $1,333.33 a month. Lesson 3.5 and Unit 4 turn this into a maximum loan.

10. Hard The Cedar Avenue duplex cash-flows $1,706.46 a year on $55,000 invested. If you had instead used the $55,000 to pay off a 7% loan, you would save $3,850 of interest in the first year. Compare the two and explain what else belongs in the decision.

Show answer

Cash-on-cash is 3.1% against a guaranteed 7% interest saving. The rental adds principal paydown and possible appreciation, but also risk and work; paying down debt is certain. The comparison is why many careful investors pass on thin deals.

11. **Challenge** In this example, ten years after buying, a rental is worth $330,000, the loan balance is $150,000 and cash flow is $5,400 a year. Find the equity and the return on equity, and say what the number suggests.

    Show answer

    Equity $180,000; ROE $5,400 ÷ $180,000 = 3.0%. Much money is tied up earning little cash, a reason to weigh paying off the loan, improving the property or selling (Unit 10).

12. **Challenge** Show that a cap rate is the inverse of Adam Smith's "years' purchase," using land bought at twenty-five years' purchase. What "cap rate" is that, and what does Smith say made such prices possible?

    Show answer

    Price = 25 × rent, so rent ÷ price = 1 ÷ 25 = 4%. Smith tied it to falling interest rates: as interest sank to four percent, buyers accepted a four percent return from land.

COMMON MISTAKES

- Subtracting the mortgage payment to find NOI. NOI is before debt service; cash flow is after it.
- Computing cap rate on the asking price or the seller's pro forma NOI. Use your own NOI and the price you would actually pay.
- Leaving closing costs and upfront repairs out of cash invested, which inflates cash-on-cash.
- Computing DSCR on gross rent rather than NOI. Lenders' conventions vary (Unit 4), but the property's true coverage is NOI ÷ debt service.
- Counting appreciation or principal paydown as cash flow. Only cash flow pays the bills; appreciation is never guaranteed.
- Assuming a high cap rate always means a better deal. Higher cap rates usually come with more risk, older buildings or weaker demand.

Make it a game · Cap Rate Showdown. Cut out ten real listings (or write them on cards) with price, rent and an estimate of operating expenses at 40% of gross rent plus 6% vacancy. Deal two cards to each player. Each player computes NOI and cap rate for both cards on scratch paper, keeps the better one and lays it down. Highest cap rate wins the round — but any player may "challenge" a winner by naming a risk on the card (old roof, high taxes, weak rent comps). If the table agrees the risk is real, the challenger wins instead. Play five rounds; the lesson is that the highest number is not always the best deal.

Scripture. "His lord said unto him, Well done, thou good and faithful servant: thou hast been faithful over a few things, I will make thee ruler over many things: enter thou into the joy of thy lord." (Matthew 25:21, KJV)

In the parable of the talents the master expects his servants to put what he entrusted to productive use, and he praises faithfulness, not speculation. Measuring a property's real return — and refusing to pretend a losing deal is a winning one — is part of being faithful over a few things. The joy the parable promises comes from the master's approval, not from the size of the return.

3.4 Rules of Thumb and Their Limits: 1%, 50% and 70%

OBJECTIVES

- Apply the 1% rule, the 50% rule and the 70% rule to a listing, exactly as the Deal Analyzer computes them.
- Explain what each rule assumes and why it fails in high-price markets, low-price high-risk markets and changing interest-rate environments.
- Compare a rule-of-thumb estimate with a full worksheet analysis and explain the difference in dollars.
- Adjust the 70% rule to 65–75% and explain why investors change the percentage with price level and costs.
- Use rules of thumb as screens to sort many listings quickly, reserving full analysis for the few that pass.

> **Warm-up.** Five minutes. Without a calculator, guess how many years it takes $1,000 to double if it grows 6% a year. Write your guess. Then divide 72 by 6. Then check by multiplying 1.06 by itself twelve times on a calculator. How close was the shortcut? You have just used a rule of thumb more than five hundred years old.

WATCH

Real Estate Investing Rules You MUST Know (The 2%, 50% & 70% Rules)

BiggerPockets · 10:30

https://www.youtube.com/watch?v=2GUe5Y41sbU

> **WHEN TO WATCH**
> Watch after the third core idea. Pause at each rule and work the on-screen example yourself before the host does; then write one way each rule could mislead you in your own town.

BACKUP VIDEO

The One Percent Rule - Quick Math For Positive Cash Flow Rental Properties

Coach Carson · 40:29

https://www.youtube.com/watch?v=AXKQETKrDLY

A long episode: watch 6:21–19:26 (when to use and when not to use the 1% rule) and 25:33–32:45 (two case studies). Note one market where Coach Carson says the rule fits and one where it misleads.

KEY TERMS

rule of thumb

A quick approximate method based on experience, used to screen choices before careful analysis.

1% rule

A screen that a rental's monthly rent should be at least 1% of its purchase price plus upfront repairs.

2% rule

An older, stricter screen requiring monthly rent of at least 2% of price, generally met only by very low-priced properties.

50% rule

A screen that estimates operating expenses plus vacancy at half of gross rent, so cash flow is about half the rent minus the mortgage payment.

70% rule

A flip and BRRRR screen that sets a maximum offer at 70% of after-repair value minus the rehab budget.

after-repair value (ARV)

The estimated market value of a property after planned repairs, based on recent sales of comparable renovated homes.

maximum allowable offer (MAO)

The highest price an investor can pay under a chosen rule or target, such as ARV × 70% − rehab.

screen

A fast first test used to discard most listings so that only promising ones receive full analysis.

rule of 72

A shortcut that estimates the years needed to double money by dividing 72 by the yearly percentage growth rate.

CORE IDEAS

The story. In 1494 a Franciscan friar and mathematics teacher named Luca Pacioli published in Venice a huge book called the *Summa de arithmetica*. It is famous as the first printed description of double-entry bookkeeping, the system of debits and credits that accountants still use. But tucked inside it is a smaller gift to merchants: a rule for finding how many years it takes money to double at a given rate of interest. Divide 72 by the rate, Pacioli wrote, and you have the years. At 6%, money doubles in about twelve years; at 8%, about nine. Pacioli gave no proof. He did not need one. Merchants crowded around a Venetian counting table needed a quick answer that was nearly right, and the **rule of 72** gave them one. Five centuries later it is still taught, and it is still only approximately true.

How they figured it out. The rule of 72 works because the exact doubling time is close to 69.3 ÷ rate, and 72 is easy to divide by 2, 3, 4, 6, 8, 9 and 12. It is very good between about 6% and 10% and worse at the extremes. Rental investors built their own rules the same way: from experience in particular places and times. The **1% rule** and the stricter **2% rule** spread in online investor communities in the years after the 2008 crash, when distressed houses in many cities could be bought cheaply. The **50% rule** came from landlords' observation that, over many years, operating expenses and vacancy on ordinary rentals tended to eat about half the rent. The **70%**

rule grew up among house flippers. Each rule fits some markets and some decades and misleads in others — exactly like Pacioli's 72.

The big idea. A rule of thumb is a **screen**, not a verdict. It helps you discard most listings in seconds so you can spend an hour on the few worth it. The Deal Analyzer computes three. The **1% rule**: $\text{rent} \div (\text{price} + \text{repairs}) \geq 1\%$. The **50% rule**: $\text{cash flow} \approx 50\% \times \text{monthly income} - \text{P\&I}$, assuming vacancy and every operating expense together take half the gross income. The **70% rule**: $\text{MAO} = \text{ARV} \times 70\% - \text{rehab}$. In this example, the Elm Street house fails the 1% rule ($\$2{,}100 \div \$255{,}000 = 0.82\%$) and the 50% rule estimates $\$1{,}050 - \$1{,}247.44 = -\$197.44$ a month. The full analysis says $-\$65.77$. Both screens said "probably not," and the worksheet agreed, but the rule was off by more than $130 a month.

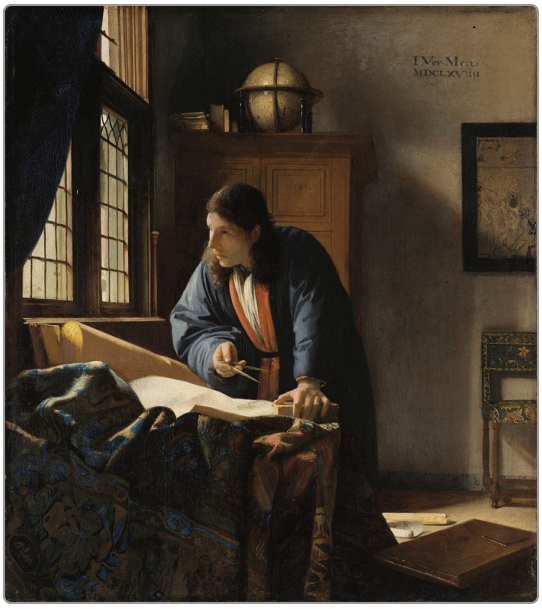
The 1% rule fails in two directions. In high-price markets — many Pacific Northwest and coastal cities — almost nothing passes; in this example, a $750,000 house renting for $3,600 is at 0.48%, and with 25% down at 7% the 50% rule shows about $-$1,942 a month. Investors there either buy with far more cash, buy for appreciation (a bet, not a plan), house hack, or invest elsewhere. In low-price markets the rule passes houses that are poor deals. In this example, a $90,000 house renting for $1,150 passes at 1.28% — yet with 10% vacancy, 10% repairs, 12% CapEx, owner-paid water and heavy turnover, its full analysis loses $47 a month. Cheap houses often carry high vacancy, repairs and tenant turnover that the rule cannot see. Interest rates matter too: a house that passed the 1% rule and cash-flowed at a 4% mortgage rate may not at 7%. Today a listing that "meets the 2% rule" is usually a warning sign about condition or location.

The 50% rule is only as good as its assumption. Actual expenses run *higher* than half for older houses, cheap houses where fixed costs are a large share of a small rent, owner-paid utilities, high-tax states and properties with professional management. They run *lower* for newer houses, low-tax areas and tenants who pay every utility. In this example, Elm Street's actual vacancy plus operating expenses are $(\$1{,}512 + \$9{,}507.92) \div \$25{,}200 = 43.7\%$ of gross income, so the 50% rule was too pessimistic. The $90,000 house's are about 65%, so the rule was far too optimistic. Notice what the rule includes — vacancy, taxes, insurance, repairs, CapEx, management — and what it leaves out: the mortgage payment, which you subtract separately. The tool's 50% estimate uses rent plus other income, before vacancy.

The **70% rule** belongs to flips and BRRRR (Units 6 and 7). It reserves 30% of **after-repair value (ARV)** for buying and selling costs, holding costs, financing and profit, then subtracts the rehab. In this example, a house with an ARV of $320,000 and a $55,000 rehab has a **maximum allowable offer** of $224,000 − $55,000 = $169,000. Many investors adjust the percentage: in expensive markets, where costs are a smaller share of a large price, some use 75% or more; in cheap markets, where fixed costs loom large, 65% is common. Those are examples, not standards. The rule's two inputs are its weak points: an optimistic ARV or a thin rehab budget makes any price look safe. Like every screen, the 70% rule only tells you whether to look closer. It never tells you to buy.

Run the numbers. The Rental worksheet prints a "Quick screens" table: the 1% rule (pass or fail, using price plus upfront repairs) and the 50% rule estimate shown beside your real cash flow, so you can see how far apart they are. The House hack worksheet shows total rent ÷ price, and the Fix & flip worksheet shows the 70% rule maximum offer and how far your price is over or under it. Use them as a funnel: screen twenty listings in twenty minutes with the 1% and 50% rules, run full worksheets on the two or three survivors, and walk away from the rest without regret. The classic mistakes: treating a pass as approval; leaving repairs out of the 1% denominator; subtracting vacancy and then applying the 50% rule (double counting); applying the 70% rule to list price instead of ARV; and borrowing a rule from another city or another decade without testing it against full worksheets in your own market.

PICTURE STUDY



The Geographer, Johannes Vermeer, 1669 · Oil on canvas · Städel Museum, Frankfurt

Image: Wikimedia Commons, public domain

Johannes Vermeer (1632–1675) of Delft painted only about three dozen pictures that survive, most of them quiet rooms filled with window light. In *The Geographer* a scholar pauses in the middle of measuring a chart, dividers in hand, and looks up as if an idea has just come to him. The dividers are a tool for quick, practical measurement — step them across the map and you know the distance without a long calculation. That is exactly what a rule of thumb does for an investor. But notice that the geographer also has globes, maps and charts around him: a quick measure is checked against careful work.

Look closely

- Find the dividers in his hand. What would he do with them on the chart?
- Look at the light from the window. Where does it fall most brightly, and what does Vermeer want you to notice?
- Find the globe, the wall map and the papers on the floor. What do they suggest about how thorough his work is?
- His eyes are not on the chart but on the window. What might he be thinking about?

Talk about it

1. A pair of dividers gives a quick answer, but a careful mapmaker checks it. Which of the three rules of thumb in this lesson most needs checking, and why?
2. When might a rule of thumb lead a hurried person into a bad decision?
3. Proverbs says the simple believe every word, but the prudent look well to their going. How does checking a quick answer show prudence and humility?

PROJECT

The Twenty-Listing Screen

You will act like a working investor on a Saturday morning: screen twenty real listings in your area with the rules of thumb, then run full worksheets on the best three and see how well the rules predicted the results. This is how deals are actually found — most are discarded in seconds — and it will show you which rule fits your own market. Use only public listings; contact no one.

You will need

- Twenty current for-sale listings (houses and small multifamily) from a public listing site
- Rent estimates for each from comps or HUD Fair Market Rents as a rough benchmark
- A spreadsheet with columns for price, repairs, rent, 1% test, estimated P&I and 50% estimate
- The School Launch Deal Analyzer (Rental worksheet) and your deal binder

Steps

1. Enter the twenty listings in the spreadsheet with price, an estimate of upfront repairs (0 if move-in ready) and an estimated rent.
2. Add a column for the 1% test and mark each pass or fail.
3. Estimate P&I at 25% down and an example rate (the tool will compute it; or use $6.65 per $1,000 borrowed at 7% for 30 years), and add a 50% rule cash-flow column.
4. Sort by the 50% estimate and choose the top three listings.
5. Run each of the three in the Rental worksheet with your best honest inputs (taxes after reassessment, real insurance, CapEx, management).
6. In a small table, compare each listing's 50% estimate with its full cash flow, and compute its actual vacancy-plus-expense percent.
7. Print the three worksheets and write a verdict for each — buy, negotiate to a stated price, or walk away — plus one sentence on whether the 1% and 50%

rules were too strict or too loose in your market. File all in your deal binder.

INVESTOR'S NOTEBOOK

1. Flashcards for rule of thumb, 1% rule, 2% rule, 50% rule, 70% rule, ARV, MAO, screen and rule of 72 — each with its formula and one way it can mislead.
2. Draw a funnel: 20 listings at the top (1% and 50% screens), 3 in the middle (full worksheets), 1 or 0 at the bottom (offer). Label each stage with the time it takes.
3. Trap list: a pass is not approval; repairs belong in the 1% denominator; the 50% rule excludes the mortgage; the 70% rule uses ARV, not list price; rules from another city or decade must be tested.

KEY FORMULAS

1% rule: $\dfrac{\text{monthly rent}}{\text{price} + \text{upfront repairs}} \geq 1\%$

50% rule: $\text{monthly cash flow} \approx 0.50 \times (\text{rent} + \text{other income}) - \text{P\&I} - \text{MI}$

70% rule: $\text{MAO} = \text{ARV} \times 0.70 - \text{rehab}$

Rule of 72: $\text{years to double} \approx 72 \div \text{annual \% rate}$

From history. Pacioli was a friend of Leonardo da Vinci, who drew the geometric illustrations — hollow and solid polyhedra — for Pacioli's later book *De divina proportione*, printed in 1509. The same friar who gave merchants a shortcut for doubling money also wrote the bookkeeping method that would let them check whether the shortcut matched their real accounts.

Example 1. In this example, apply the 1% and 50% rules to the Elm Street house (price $250,000, repairs $5,000, rent $2,100, P&I $1,247.44) and compare with the full analysis of −$65.77 a month.

Show solution

1. 1% rule: $\$2{,}100 \div (\$250{,}000 + \$5{,}000) = 0.82\%$ — fails
2. 50% rule: $0.50 \times \$2{,}100 - \$1{,}247.44 = -\$197.44$ a month
3. Actual vacancy plus OpEx: $(\$1{,}512 + \$9{,}507.92) \div \$25{,}200 = 43.7\%$, less than 50%
4. Difference: $-\$65.77 - (-\$197.44) = \$131.67$ a month

Answer: Both screens reject the house, and the full worksheet agrees; but the 50% rule was $131.67 a month too pessimistic because this house's real expenses are about 44% of income.

Example 2. In this example, a $90,000 house rents for $1,150 (closing $3,000, no repairs, 25% down, 7%, 30 years, P&I $449.08). Honest inputs: taxes $1,500, insurance $1,100, owner-paid water and trash $60 a month, vacancy 10%, repairs 10%, CapEx 12%, management 10%. Screen it, then run it.

Show solution

1. 1% rule: $\$1{,}150 \div \$90{,}000 = 1.28\%$ — passes
2. 50% rule: $\$575 - \$449.08 = +\$125.92$ a month
3. Full: GSI $13,800, vacancy $1,380, EGI $12,420; OpEx $\$1{,}500 + \$1{,}100 + \$720 + \$1{,}380 + \$1{,}656 + \$1{,}242 = \$7{,}598$
4. NOI $4,822; debt service $5,388.95; cash flow −$566.95 a year, −$47.25 a month

Answer: The house passes both screens yet loses about $47 a month, because vacancy and expenses take about 65% of its income. A pass is an invitation to look closer, not a reason to buy.

Example 3. In this example — the Fix & flip worksheet's starting numbers — ARV is $320,000 and rehab is $55,000. Find the 70% rule maximum offer, the offers at 65% and 75%, and compare the worksheet's profit at the $195,000 asking price with its profit at the 70% offer.

Show solution

1. 70%: $\$320{,}000 \times 0.70 - \$55{,}000 = \$169{,}000$
2. 65%: $\$208{,}000 - \$55{,}000 = \$153{,}000$; 75%: $\$240{,}000 - \$55{,}000 = \$185{,}000$
3. At $195,000 the price is $26,000 over; the worksheet shows profit $14,431.25 (4.5% of ARV)
4. Change the price to $169,000: profit becomes $42,608.75 (13.3% of ARV)

Answer: Maximum offer $169,000 ($153,000 to $185,000 at 65–75%). At the asking price the flip's profit is too thin to survive a delay or a low sale; at the 70% offer it has room for surprises.

PRACTICE

1. Easy In this example, a house costs $200,000 and needs $10,000 of repairs. What monthly rent does the 1% rule require?

   Show answer

   $(\$200{,}000 + \$10{,}000) \times 0.01 = \$2{,}100$ a month.

2. Easy In this example, a duplex rents for $2,400 total and its P&I is $1,000. What does the 50% rule estimate for monthly cash flow?

   Show answer

   $0.50 \times \$2{,}400 - \$1{,}000 = \$200$ a month — a screen, to be checked with a full worksheet.

3. Easy In this example, a flip has an ARV of $250,000 and a rehab budget of $40,000. What is the 70% rule maximum offer?

   Show answer

   $\$250{,}000 \times 0.70 - \$40{,}000 = \$175{,}000 - \$40{,}000 = \$135{,}000$.

4. Medium In this example, a house lists at $160,000, needs $5,000 of repairs and rents for $1,500. Does it pass the 1% rule? What price would pass?

Show answer

$1,500 ÷ $165,000 = 0.91% — fails. To pass, price plus repairs must be at most $150,000, so the price must be at most $145,000.

5. Medium In this example, a $60,000 house rents for $1,200, meeting the 2% rule. Name three things you would check before getting excited.

Show answer

Condition (roof, systems, lead paint, foundation), the neighborhood's vacancy, turnover and rent collection, and true expenses such as taxes, insurance and repairs. Very high rent-to-price ratios usually reflect higher risk or costs.

6. Medium List what the 50% rule assumes is inside the "50%" and what it leaves out.

Show answer

Inside: vacancy and credit loss, taxes, insurance, repairs, CapEx, management, utilities and other operating costs. Left out: the mortgage principal and interest (and mortgage insurance), which you subtract separately.

7. Medium In this example, a flip has an ARV of $400,000 and a $60,000 rehab. Compute the maximum offer at 65%, 70% and 75%, and explain why investors vary the percentage.

Show answer

$200,000, $220,000 and $240,000. Costs and required profit are a larger share of a cheap house's value and a smaller share of an expensive one's, so investors adjust — but every adjustment must be tested with a full flip worksheet.

8. Hard Use the rule of 72 to estimate how long a house takes to double in value at 6% and at 3% appreciation. Check the 3% answer with 1.03^{24}.

Show answer

About 12 years at 6% and 24 years at 3%; $1.03^{24} \approx 2.03$, so the rule is close. Neither rate is promised — appreciation can be zero or negative for years.

9. Hard In this example, a Pacific Northwest house costs $750,000 and rents for $3,600. With 25% down at 7% (P&I $3,742.33), what do the 1% and 50% rules say, and what should an investor conclude?

Show answer

$3,600 ÷ $750,000 = 0.48% fails; 50% rule $1,800 − $3,742.33 = −$1,942.33 a month. As an ordinary leveraged rental it does not work; buying it would be a bet on appreciation. Consider a house hack, a much larger down payment, or another market.

10. Hard For the Elm Street house, vacancy plus operating expenses are 43.7% of GSI; for the $90,000 house, about 65%. For each, was the 50% rule too optimistic or too pessimistic?

Show answer

Elm Street: too pessimistic (real costs are below 50%). The $90,000 house: too optimistic (real costs are well above 50%), which is why it passed the screen yet loses money.

11. Challenge The exact doubling time at rate r is $\ln 2 \div \ln(1 + r)$. Compare the rule of 72 with the exact answer at 1% and at 24%, and explain where the rule works best.

Show answer

At 1%: rule 72 years, exact about 69.7. At 24%: rule 3 years, exact about 3.2. The rule is best in the middle range, about 6–10%, which is why Pacioli's merchants found it so useful.

12. Challenge The Cedar Avenue duplex passes the 1% rule ($1,950 ÷ $186,000 = 1.05%) and the 50% rule estimates $76.84 a month, but its full worksheet shows $142.21. Explain the difference and state the lesson.

Show answer

Its actual vacancy plus operating expenses are ($1,404 + $9,511.64) ÷ $23,400 ≈ 46.6%, below 50%, so the rule underestimated cash flow by about $65 a month. Rules of thumb point you toward a deal or away from it; only the full worksheet measures it.

COMMON MISTAKES

- Treating a pass as approval. A property that passes the 1% or 50% rule still needs a full worksheet; many cheap houses pass and lose money.
- Leaving upfront repairs out of the 1% rule. Divide rent by price plus repairs.
- Applying the 50% rule after subtracting vacancy. The rule's 50% already includes vacancy; apply it to gross rent.
- Subtracting the mortgage inside the 50%. The 50% covers vacancy and operating expenses; subtract P&I separately.
- Using list price or an optimistic ARV in the 70% rule. ARV must come from renovated sold comps, and the rehab budget must be honest.
- Importing a rule from another city or decade. Test every rule against full worksheets in your own market and at today's interest rates.

Make it a game · Screen or Steam. Make twelve listing cards with price, repairs, rent and P&I (use real listings, or invent them). Flip one card at a time. Everyone has ten seconds to call "Screen in" (passes the 1% rule and the 50% rule shows positive cash flow) or "Steam out" (fails). Then the reader reveals the full-worksheet cash flow written on the back, prepared beforehand in the Deal Analyzer. Correct calls score a point; a "Screen in" on a card whose full cash flow is negative costs two points. After twelve cards, discuss which cards fooled the rules and why.

Scripture. "The simple believeth every word: but the prudent man looketh well to his going." (Proverbs 14:15, KJV)

A rule of thumb is a word passed from investor to investor, and the simple believe it without testing. The prudent use it to look, then look well — running the full numbers before taking a step. Prudence is not suspicion of every shortcut; it is the habit of checking where a shortcut leads before following it.

3.5 The Full Deal Worksheet and the Stress Test

OBJECTIVES

- Carry a real listing through the full analysis: rent comps, expense build, loan quote, Rental worksheet and verdict.
- Perform a sensitivity analysis by changing one input at a time (rent, vacancy, interest rate, taxes and insurance, CapEx) and interpret the results.
- Solve backward from a target monthly cash flow or a target DSCR to a maximum loan and a maximum offer price.
- Write a verdict — buy, negotiate to a stated price, or walk away — defended with numbers, and an honest counter-offer rationale.
- Recognize "massaged" inputs and explain why the walk-away discipline protects an investor.

> **Warm-up.** Five minutes. You are planning a family camping trip that costs $600 if everything goes right. Write down three things that could go wrong and what each would add to the cost. Now write the most the trip could cost if two of them happened at once. Would you still go? Stress-testing a plan is just this habit, applied to a house.

WATCH

How to Analyze a Duplex Rental Property (Real Life Example)

Coach Carson · 36:22

https://www.youtube.com/watch?v=MPbuwBH_ZDo

> **WHEN TO WATCH**
> Watch 6:53–28:17 in two sittings — surface numbers, the 1% rule, unleveraged yield, market rent, the spreadsheet and Coach Carson's verdict. Fill a blank printed Deal Analyzer worksheet with his duplex numbers as he goes; the IRR section (29:08–36:22) is optional.

BACKUP VIDEO

How To Analyze A Rental Property (The Quick & Dirty Way)

BiggerPockets · 11:30

https://www.youtube.com/watch?v=2uogn4qtZ8U

A ten-minute "quick and dirty" analysis by Brandon Turner. Watch after the project and compare his shortcuts with the full worksheet you just completed: which steps did he skip, and when is that acceptable?

KEY TERMS

sensitivity analysis

Changing one input at a time by a plausible amount to see how much a deal's results depend on it.

break-even price

The highest purchase price at which a rental's cash flow is zero under your assumptions.

solving backward

Starting from a required result (cash flow or DSCR) and working back to the maximum loan and price that produce it.

stress test

Running a deal under bad but realistic conditions, alone or combined, to see whether it survives.

target cash flow

The minimum monthly cash flow an investor requires before making an offer.

offer price

The price an investor is willing to pay, set by the numbers rather than the list price.

counter-offer

A response to a seller's price or terms proposing different ones.

deal binder

The investor's record of every analyzed property: listing, comps, printed worksheet and written verdict.

walk-away discipline

The habit of declining any deal that does not meet written criteria, however attractive it seems.

massaged inputs

Assumptions bent to make a deal look better — higher rent, lower vacancy or less CapEx than the evidence supports.

CORE IDEAS

The story. On March 17, 1930, construction began on the Empire State Building in New York, and on May 1, 1931 — about thirteen and a half months later — it opened as the tallest building in the world. It was a triumph of planning: steel, stone and men arriving on a tight schedule. The rent plan was another matter. The builders had committed to the project in the boom of the late 1920s, and they opened into the Great Depression. In its first year only about 23 percent of the office space was rented, and New Yorkers mocked it as the "Empty State Building." By 1935 it was losing about a million dollars a year, and the owners did not reach break-even until the 1950s. Nothing about the building was badly made. What failed was the assumption that the tenants would come. No one had asked hard enough the stress-test question: what if they don't?

How they figured it out. The 1930s taught lenders and investors to test plans against bad cases instead of good ones. Lenders began demanding larger down payments, steady amortization and income that covered the payments with room to spare — the debt service coverage ratio you met in Lesson 3.3. Analysts learned **sensitivity analysis**: change one assumption at a time and watch the result move, so you know which assumption the whole plan rests on. The same idea now runs through the financial world; since the financial crisis of 2008–2009, federal regulators have run regular stress tests on the largest U.S. banks to see whether they could survive a severe recession. For a small investor the question is identical and the arithmetic is simpler. Before you buy, change the rent, the vacancy, the interest rate, the taxes and the repairs, one at a time and together, and see whether the deal — and you — would survive.

The big idea. A complete analysis follows the same path every time: the **listing**; **rent comps** (Lesson 2.3 and 3.1); the **expense build** with taxes after reassessment, a landlord-policy quote and a CapEx table (3.2); a **loan quote** (Unit 4); the **Rental worksheet** (3.3); a **stress test**; an **offer price**; and a written **verdict** filed in the **deal binder**. The Deal Analyzer's stress test runs five single changes. In this example, for the Elm Street house: as entered, −$65.77 a month (DSCR 0.95); rent 10% lower, −$218.10 (0.83); vacancy up 5 points, −$161.32 (0.87); rate up 1 point, −$194.14 (0.86); taxes and insurance up 20%, −$134.10 (0.89); CapEx up 5 points, −$170.77 (0.86). The deal already loses money, and every plausible surprise makes it worse.

When a deal fails, do not abandon it until you have **solved backward** for the price that would work. Start from your **target cash flow** or a lender's DSCR, find the most debt service the property can carry, turn that into a maximum loan using the loan's monthly payment per dollar, and divide by the loan-to-price ratio. In this example, the Elm Street house's NOI is $14,180.08. For +$100 a month, debt service can be at most $14,180.08 − $1,200 = $12,980.08, or $1,081.67 a month. At 7% for 30 years each borrowed dollar costs $0.0066530 a month, so the loan can be $162,584 and, with 25% down, the price about $216,750. For a DSCR of 1.25 the price falls to about $189,450. Those are your negotiating numbers — and a lower price usually lowers the reassessed taxes too, which adds a little cushion.

Single changes are not the whole test. Bad news often arrives together: a recession can lower rents and raise vacancy in the same year. In this example, Elm Street at a 10% lower rent *and* an 8% rate would lose about $346 a month. Even the Cedar Avenue duplex from Lesson 3.3, which cash-flows $142 a month, falls to about $1 a month with rent 10% lower and a DSCR of 1.00. That is why the cash reserve from Lesson 3.2 belongs in the cash a deal requires, and why careful investors look for deals that survive at least one bad change with positive cash flow. Beware **massaged inputs**. In this example, nudging Elm Street's rent up $100, cutting vacancy to 3% and CapEx to 3% turns −$65.77 into +$154.83 a month without changing anything real. A spreadsheet tortured long enough will confess to any deal you want.

Every analysis ends in one of three verdicts. **Buy**: the deal meets your written criteria at the asking price and survives the stress test. **Negotiate**: it works at a lower price you have solved for, and you would offer that price with an honest explanation — the rent comps, the tax reassessment, the roof's age — never by inventing defects or pretending the house is worse than it is. **Walk away**: it does not work at any price

the seller is likely to accept. Most deals end in the third verdict, and that is success, not failure; the course grades a well-reasoned walk-away exactly like a good find. The **walk-away discipline** means writing your criteria (for example, positive cash flow after a 10% rent drop, DSCR at least 1.25, cash-on-cash above what paying down debt would earn) before you look, and keeping them when you fall in love with a front porch.

Run the numbers. On the Rental worksheet, the "What if? (stress test)" table shows monthly cash flow, cash-on-cash and DSCR for each single change; to test a combination, change two inputs yourself and read the cards. Solve backward by trial: lower the Purchase price (and the Property taxes, if your county reassesses at the sale price) until the cash-flow or DSCR card meets your target, and compare with your hand calculation. Use **Copy link** or **Save** to keep each scenario, and **Print** to file the worksheet in your deal binder with the verdict written on the back. A careful investor asks which single assumption the deal depends on most and checks that one twice. The classic mistakes: stress-testing only the rent; massaging inputs until the deal "works"; forgetting the reserve in the cash needed; offering the list price because you like the house; and treating a negotiated price as a reason to relax every other assumption.

PICTURE STUDY



Workman on the Framework of the Empire State Building, Lewis W. Hine, 1930 · Photograph (gelatin silver print) · National Archives and Records Administration, College Park, Maryland

Image: Wikimedia Commons, public domain

Lewis Hine (1874–1940) began as a teacher and became one of America's great documentary photographers, known for his pictures of immigrants and working children. In 1930 he was hired to document the construction of the Empire State Building, and he climbed the steel himself — sometimes swung out in a box over the street — to photograph the men who built it. This old-timer, bolting a joint high above the city, shows the care that went into every piece of the building. It opens this lesson because the building was superbly built and still lost money for years: the craftsmanship was sound, but the rent assumptions were not tested against hard times.

Look closely

- Look at his gloves, wrench and the rows of rivets. What does this picture tell you about how carefully the building was made?
- Find the Chrysler Building in the background. The two towers were rivals for "tallest in the world." What does a race like that do to a builder's judgment?
- Notice how little stands between the workman and the drop. What kinds of risk did he accept, and what kinds did the building's owners accept?
- Hine stood on the steel to take this photograph. What does that suggest about his commitment to telling the true story?

Talk about it

1. The building was finished on time but sat mostly empty for years. Which of the five stress tests in this lesson would have warned its owners?
2. Why is it easier to test a plan's physical parts — steel, bolts, schedules — than its assumptions about people and markets?
3. Jesus asked which builder does not first sit down and count the cost. How does a stress test fulfill that command, and how might it guard against pride?

PROJECT

Three Full Deals

This is the unit's capstone project and the heart of your deal binder. You will carry three real listings — at least one single-family house and one small multifamily property — all the way through: rent comps, expense build, an example loan, the Rental worksheet, the stress test, a backward-solved offer price and a written verdict with a counter-offer price. The purchases are pretend, and you will not contact any seller or agent; the counter-offer is written for your binder and a parent's review, not sent.

You will need

- Three current listings and their public records (assessor, tax history)
- Rent comps (at least three per unit) and your CapEx table method from Lesson 3.2
- An example loan rate and terms, labeled as an example
- The School Launch Deal Analyzer (Rental worksheet), a printer and your deal binder

Steps

1. For each listing, write a one-page summary: address, price, units, beds and baths, age, condition notes, and your market rent per unit with its three best comps.
2. Build the expenses honestly: taxes after reassessment at your price, a landlord-policy estimate, utilities, other expenses, repairs %, CapEx % from a component table, and management %.
3. Enter everything in the Rental worksheet with an example loan, save the scenario, and copy the four cards and the stress-test table into your summary.
4. Test one combined stress of your choice (for example, rent −10% and rate +1 point) by changing two inputs, and record the result.
5. Solve backward for the highest price that meets your written criteria (state them: for example, at least $100 a month of cash flow and DSCR 1.25) and check it in the tool.

6. Write a verdict for each — buy, negotiate to your stated price, or walk away — in one paragraph citing at least four numbers, and draft a two-sentence honest counter-offer rationale for any "negotiate" verdict.
7. Print all three worksheets, staple each to its summary and verdict, and file them in the deal binder. Present one to a parent and defend it aloud.

INVESTOR'S NOTEBOOK

1. Flashcards for sensitivity analysis, stress test, break-even price, target cash flow, solving backward, offer price, counter-offer, walk-away discipline, deal binder and massaged inputs.
2. Draw a tornado chart for the Elm Street house: one horizontal bar for each stress-test row, its length equal to the drop in monthly cash flow (rent −10%: $152; rate +1: $128; CapEx +5: $105; vacancy +5: $96; taxes and insurance +20%: $68), longest at the top.
3. Write your personal deal criteria in ink — minimum cash flow after a rent drop, minimum DSCR, minimum cash-on-cash — and below them a trap list: falling in love with the house, massaging inputs, testing only one variable, forgetting the reserve.

KEY FORMULAS

$$\text{Max annual debt service (target cash flow)} = \text{NOI} - 12 \times \text{target monthly cash flow}$$

$$\text{Max annual debt service (target DSCR)} = \text{NOI} \div \text{target DSCR}$$

$$\text{Max loan} = \frac{\text{max monthly P\&I}}{\text{payment per dollar}}, \quad \text{payment per dollar} = \frac{r}{1 - (1+r)^{-n}}$$

$$\text{Max price} = \frac{\text{max loan}}{1 - \text{down payment \%}}$$

$$\text{Change in cash flow} = \text{stressed cash flow} - \text{base cash flow}$$

From history. The Empire State Building's owners found an unexpected source of income in the lean years: the observation deck. In its first year it brought in about two million dollars — roughly as much as the rents. A creative investor looks for honest "other income," but the lesson cuts both ways: the building survived partly on income no pro forma had counted on, which is luck, not a plan.

Example 1. In this example, stress the Elm Street house by lowering rent 10% (to $1,890), all else unchanged. Compute the new cash flow by hand and confirm the tool's stress-test row.

Show solution

1. GSI $\$1{,}890 \times 12 = \$22{,}680$; vacancy $\$1{,}360.80$; EGI $\$21{,}319.20$
2. OpEx: $\$2{,}800 + \$1{,}300 + \$1{,}360.80 + \$1{,}587.60 + \$1{,}918.73 = \$8{,}967.13$ (repairs, CapEx and management shrink with rent)
3. NOI $\$21{,}319.20 - \$8{,}967.13 = \$12{,}352.07$
4. Cash flow $\$12{,}352.07 - \$14{,}969.31 = -\$2{,}617.24$ a year, $-\$218.10$ a month; DSCR 0.83

Answer: A 10% rent drop moves cash flow from $-\$65.77$ to $-\$218.10$ a month — the same figure in the tool's "Rent 10% lower" row.

Example 2. In this example, find the highest price at which the Elm Street house cash-flows $+\$100$ a month, keeping NOI at $14,180.08, 25% down and a 7%, 30-year loan.

Show solution

1. Max debt service: $\$14{,}180.08 - \$1{,}200 = \$12{,}980.08$ a year, $1,081.67 a month
2. Payment per dollar: $\dfrac{0.07/12}{1-(1+0.07/12)^{-360}} = 0.0066530$
3. Max loan: $\$1{,}081.67 \div 0.0066530 \approx \$162{,}584$
4. Max price: $\$162{,}584 \div 0.75 \approx \$216{,}778$; round down to $216,750
5. Check in the Rental worksheet with Purchase price 216750: monthly cash flow $100.14

Answer: Offer no more than about $216,750 — $33,250 below the asking price. If the county reassesses at the lower price, taxes fall too, adding a little margin.

Example 3. In this example, a lender requires a DSCR of 1.25. Find the maximum price for the Elm Street house under the same loan terms, and the cash flow at that price.

Show solution

1. Max debt service: $\$14{,}180.08 \div 1.25 = \$11{,}344.06$ a year, $\$945.34$ a month
2. Max loan: $\$945.34 \div 0.0066530 \approx \$142{,}092$
3. Max price: $\$142{,}092 \div 0.75 \approx \$189{,}455$; use $\$189{,}450$
4. Worksheet check at $\$189{,}450$: DSCR 1.25, cash flow $\$236.36$ a month

Answer: About $\$189{,}450$. The DSCR target is stricter than the $\$100$ cash-flow target here, and the deal that results can survive a 10% rent drop.

PRACTICE

1. Easy Name the five single-change stress tests the Rental worksheet runs.

   Show answer

   Rent 10% lower, vacancy up 5 points, interest rate up 1 point, taxes and insurance up 20%, and CapEx up 5 points.

2. Easy In one sentence, what is sensitivity analysis and why is it useful?

   Show answer

   Changing one assumption at a time to see how much the result moves; it shows which assumption a deal depends on most, so you can check that one hardest.

3. Easy What are the three possible verdicts on an analyzed deal, and which is most common?

   Show answer

   Buy, negotiate to a stated price, or walk away. Walking away is most common, and a well-reasoned walk-away is a success.

4. Medium The Cedar Avenue duplex cash-flows $142.21 a month as entered; with rent 10% lower the tool shows $0.75 a month and DSCR 1.00. What does that tell you?

Show answer

The deal survives a rent drop only barely: income would just cover expenses and the mortgage, with nothing for surprises. A reserve is essential, and many investors would negotiate for more margin.

5. Medium In this example, find the break-even price for the Elm Street house — the price at which cash flow is $0 — with NOI $14,180.08, 25% down, 7%, 30 years.

Show answer

Max debt service $14,180.08 a year, $1,181.67 a month; loan $1,181.67 ÷ 0.0066530 ≈ $177,614; price ≈ $236,819. Above that price the house loses money every month.

6. Medium At an 8% rate, what is the P&I on Elm Street's $187,500 loan, and what is the new monthly cash flow?

Show answer

P&I $1,375.81; debt service $16,509.70; cash flow $14,180.08 − $16,509.70 = −$2,329.62 a year, −$194.14 a month — the tool's "Rate +1 point" row.

7. Medium In this example, test Elm Street with rent 10% lower and an 8% rate together. The tool (after you change both inputs) shows about −$346.47 a month and DSCR 0.75. Why is the combined loss larger than either single change?

Show answer

The rent drop cuts NOI and the rate rise raises debt service at the same time, so the two losses add: about $152 plus $128 of damage on top of the base loss. Bad conditions often arrive together.

8. Hard In this example, find the highest price for the Cedar Avenue duplex that gives DSCR 1.25 (NOI $12,484.36, 25% down, 7%, 30 years).

Show answer

Max debt service $12,484.36 ÷ 1.25 = $9,987.49, $832.29 a month; loan ≈ $125,100; price ≈ $166,800. The tool at $166,800 shows DSCR 1.25 and about $208 a month.

9. Hard Write three things an honest counter-offer rationale for Elm Street at $216,750 should contain, and one thing it must never contain.

Show answer

It should cite the rent comps, the expected tax bill after reassessment and the cost of needed repairs or CapEx (such as the roof's age). It must never invent defects or misstate facts to pressure the seller.

10. Hard The Elm Street seller counters at $225,000. With taxes unchanged, the tool shows $58.98 a month, DSCR 1.05 and cash-on-cash 1.07%. Against criteria of $100 a month and DSCR 1.25, what is your verdict?

Show answer

Walk away (or hold at your price). The counter meets neither criterion, and the stress test would push it negative. Splitting the difference is not a reason to abandon written criteria.

11. Challenge You buy Elm Street at $216,750 (cash flow $100.14). The tool shows $4.59 a month with vacancy 5 points higher and −$52.19 with rent 10% lower. What should your reserve plan be?

Show answer

The deal survives a vacancy shock barely and fails a rent shock, so hold a full reserve (for example, six months of expenses and payments, about $11,000–$12,000 here) and avoid stretching for a second property until the reserve is funded.

12. Challenge Show how massaged inputs change the Elm Street result: rent +$100, vacancy 3% and CapEx 3% together turn −$65.77 into +$154.83 a month. Which single change does the most, and what evidence would be needed to justify each?

Show answer

Alone, CapEx 3% adds about $84, rent +$100 about $73 and vacancy 3% about $57 a month. Justifying them would require a component table showing almost no wear, three rent comps at $2,200, and local data showing 3% vacancy — without that evidence, the "good deal" is imaginary.

COMMON MISTAKES

- Stress-testing only the rent. Test vacancy, rate, taxes and insurance, and CapEx too, and at least one combination.

- Massaging inputs until the deal works. Every input needs evidence; if the deal only works with optimistic numbers, it does not work.
- Offering the list price because you like the house. The offer comes from solving backward from your criteria.
- Forgetting the reserve in the cash a deal requires. Down payment, closing costs, upfront repairs and the reserve are all cash in.
- Lowering the price in the tool but leaving the old tax bill. If your county reassesses at sale, lower the taxes with the price.
- Treating walking away as failure. Most deals fail the numbers; a reasoned walk-away is the discipline that protects you.

Make it a game · Buy, Negotiate or Walk Away. Prepare eight cards, each with a listing's price and its full-worksheet results at the asking price (cash flow, DSCR, and the stress-test row for rent −10%). Write each player's criteria on a slip first (for example, $100 a month and DSCR 1.25). Flip a card: everyone writes BUY, NEGOTIATE with a price, or WALK. Then roll a die for the market: 1–2 rent drops 10%, 3 rates rise, 4–6 nothing happens. Players who bought a card that goes negative under the roll lose two points; correct walk-aways score one; a negotiated price that meets the criteria scores two. Highest score after eight cards wins.

Scripture. "For which of you, intending to build a tower, sitteth not down first, and counteth the cost, whether he have sufficient to finish it? Lest haply, after he hath laid the foundation, and is not able to finish it, all that behold it begin to mock him, Saying, This man began to build, and was not able to finish." (Luke 14:28–30, KJV)

These verses are printed on the Deal Analyzer itself. Jesus' builder counts the cost before laying a foundation; a stress test counts it under the conditions that are likely to come, not only the ones you hope for. The mockery in the parable falls on the man who started what he could not finish — a warning against pride and haste that every buyer of property should take to heart.

UNIT 3

Analyzing a Rental Deal

For more than a century, nearly every lease in New York City ended on the same May morning, and landlords learned the hard way that rent on paper is not rent in hand. This unit teaches you to know every number in a rental. You will follow one house, the Elm Street house, from its rent to its verdict. You will build **gross scheduled income**, subtract **vacancy and credit loss** to find **effective gross income**, and list every **operating expense**, including the **capital expenditures** beginners forget, budgeted component by component. You will compute **net operating income**, **cash flow**, the **cap rate**, **cash-on-cash return** and the **debt service coverage ratio**, and learn what each one can and cannot tell you.

Then you will learn the shortcuts investors use to sort many listings quickly — the **1%**, **50%** and **70%** rules — and see, with real arithmetic, where each one misleads. Finally you will run full deals in the School Launch Deal Analyzer's Rental worksheet, **stress-test** them, and solve backward for the price that would make a failing deal work. The Elm Street house, by the way, loses about $66 a month at its asking price. Most deals do. By the end of the unit your deal binder will hold your first complete analyses, each with a printed worksheet and a verdict — buy, negotiate or walk away — that you can defend line by line.

PREREQUISITES

- Can compute percents, convert between monthly and annual amounts, and solve a one-step equation for an unknown
- Has a rent-comp grid from Lesson 2.3 and can choose a market rent from comparable rentals
- Can find a property's assessed value and tax bill on a county assessor or treasurer website (Unit 2)
- Has opened the School Launch Deal Analyzer, can switch between its worksheets, and keeps a deal binder

MASTERY CHECKLIST

- ☐ I can compute gross scheduled income, a vacancy and credit-loss allowance and effective gross income, and tell physical from economic vacancy.
- ☐ I can estimate vacancy from local data and from a turnover assumption, and decide what other income is dependable.
- ☐ I can list every operating expense of a small rental, estimate taxes after reassessment, and name what is not an operating expense.
- ☐ I can build a CapEx budget by component life and convert it to a monthly reserve and a percent of rent.
- ☐ I can compute NOI, debt service, cash flow, cap rate, cash-on-cash return, DSCR, GRM, expense ratio and break-even occupancy by hand and match the Deal Analyzer.
- ☐ I can apply the 1%, 50% and 70% rules, explain where each misleads, and use them only as screens.
- ☐ I can stress-test a deal one change at a time and in combination, and solve backward to a maximum price for a target cash flow or DSCR.
- ☐ I can write a verdict — buy, negotiate to a stated price, or walk away — defended with at least four

numbers, and refuse to massage inputs.

OPTIONAL BOOKS AND RESOURCES FOR THIS UNIT

- **School Launch Deal Analyzer**: Free. The Rental worksheet computes every measure in this unit — GSI, EGI, operating expenses, NOI, cash flow, cap rate, cash-on-cash, DSCR, GRM, break-even occupancy, the quick screens and a stress test — and prints filled-in or blank worksheets. Used in every lesson. Ages 13 and up.
- **The Book on Rental Property Investing, by Brandon Turner (BiggerPockets Publishing)**: A printed book from the publisher's own store. The standard practitioner's guide to buy-and-hold rentals, with clear chapters on income, expenses, CapEx and the "four square" analysis taught in Lesson 3.3. Read the deal-analysis chapters alongside this unit. Ages 15 and up.
- **What Every Real Estate Investor Needs to Know About Cash Flow, by Frank Gallinelli (McGraw Hill)**: A book (in print and as an e-book) from the publisher's own page that defines and works examples of NOI, cap rate, cash-on-cash, DSCR, GRM, break-even ratio and dozens of other measures. A reference for Lessons 3.3 and 3.5 and for anyone who wants the math explained twice. Ages 16 and up.
- **HUD User: Fair Market Rents**: Free, official. The Department of Housing and Urban Development's yearly estimates of typical rents by county and metro area and by bedroom count. Use it in Lessons 3.1 and 3.4 as a rough benchmark to check your rent comps — never as a substitute for them. Ages 14 and up.
- **IRS Publication 527, Residential Rental Property**: Free, official. The IRS guide for rental owners. Its list of rental expenses is a useful checklist for Lesson 3.2, and its explanation of repairs versus improvements previews Unit 9. Education, not tax advice. Ages 15 and up.

Not required. Every project in this unit works without them. School Launch has no ties to these authors, publishers or companies.

LESSONS IN THIS UNIT

3.1	**Income: Rent, Other Income and Vacancy**	3 sessions of 50 minutes
3.2	**Expenses: The Full List, CapEx and Reserves**	3 sessions of 50 minutes
3.3	**NOI, Cash Flow, Cap Rate and Cash-on-Cash**	3 sessions of 50 minutes

3.4	**Rules of Thumb and Their Limits: 1%, 50% and 70%**	3 sessions of 50 minutes
3.5	**The Full Deal Worksheet and the Stress Test**	3 sessions of 50 minutes

Unit 3 test

Closed notes and closed notebook; a basic calculator is allowed. Twenty four-choice questions, 5 points each, 100 points total. Allow about two minutes per question — set a timer for 40 minutes. Show the arithmetic for every calculation question on scratch paper, and choose the one BEST answer. Aim for 80% (16 of 20) or better, and rework every miss in your investor's notebook. Figures marked "in this example" are examples; real rents, taxes, insurance and interest rates vary by place and year. Unless a question says otherwise, use the Deal Analyzer's conventions: repairs and CapEx on scheduled rent, management on collected rent.

1. **5 pts**

   In this example, a duplex has two units at $1,200 a month and a coin laundry that nets $100 a month. What is its gross scheduled income?

   A. $28,800

   B. $27,000

   C. $30,000

   D. $28,200

2. **5 pts**

   Economic vacancy includes which of the following?

   A. Empty units, rent owed but never paid, and concessions

   B. Only units that are physically empty

   C. Only rent owed but never paid

   D. Vacancy plus the property-management fee

3. **5 pts**

   Which of these is NOT an operating expense?

   A. Property taxes

   B. Mortgage principal and interest

   C. The CapEx reserve

   D. Landlord (dwelling) insurance

4. 5 pts

In this example, GSI is $30,000, vacancy is 5% and management is 8% of collected rent. What is the management fee for the year?

A. $2,400

B. $2,160

C. $2,520

D. $2,280

5. 5 pts

Which is the most honest way to budget capital expenditures for a 25-year-old house?

A. Divide each major component's replacement cost by its useful life, adjusting for its age

B. Set CapEx to zero until something breaks

C. Use the seller's repair records from last year

D. Use the same dollar figure as the monthly repair budget

6. 5 pts

A seller says, "The roof is two years old, so you can leave CapEx at zero." The best response is:

A. Agree, because roofs are the only large replacement

B. Agree for two years, then add CapEx

C. Keep a CapEx allowance, because the roof still wears out each year and other components keep aging

D. Raise the repair budget instead and leave CapEx at zero

7. 5 pts

In this example, a rental's EGI is $28,500, operating expenses are $11,400 and the price is $285,000. What is the cap rate?

A. 5.7%

B. 6.0%

C. 4.0%

D. 10.0%

8. 5 pts

In this example, a property cash-flows $2,400 a year. The investor paid $50,000 down, $6,000 in closing costs and $4,000 for upfront repairs. What is the cash-on-cash return?

A. 4.8%

B. 4.3%

C. 2.4%

D. 4.0%

9. 5 pts

A rental's DSCR is 0.95. What does that mean?

A. Its NOI does not fully cover its annual mortgage payments

B. It earns a 0.95% return on cash invested

C. It is 95% occupied

D. It meets a typical lender's minimum

10. 5 pts

A rental's break-even occupancy is 97%. Which statement is true?

A. It will be 97% occupied

B. Its cap rate is 3%

C. It must collect 97% of scheduled income just to pay operating expenses and the mortgage

D. Its expense ratio is 97%

11. 5 pts

In this example, a property's cap rate is 5.5% and the loan's constant (annual payment per dollar borrowed) is 8.0%. What happens as the investor borrows more?

A. Cash-on-cash rises, because leverage always helps

B. Cash-on-cash falls, because each borrowed dollar costs more than it earns

C. Nothing, because cap rate ignores financing

D. The cap rate falls

12. 5 pts

In this example, a house lists for $180,000, needs $20,000 of repairs and would rent for $1,900. How does it fare on the 1% rule?

A. Passes at 1.06%

B. Passes at exactly 1.00%

C. Fails at 0.90%

D. Fails at 0.95%

13. 5 pts

The “50%” in the 50% rule is meant to cover:

A. Vacancy and all operating expenses, but not the mortgage payment

B. Operating expenses and the mortgage payment

C. Only taxes and insurance

D. Vacancy only

14. 5 pts

In this example, a flip’s after-repair value is $300,000 and the rehab budget is $50,000. What is the 70% rule maximum offer?

A. $210,000

B. $175,000

C. $160,000

D. $145,000

15. 5 pts

A $90,000 house rents for $1,150 and passes the 1% rule easily, yet its full worksheet loses money. The most likely reason is:

A. The 1% rule is always wrong

B. Its vacancy, repairs, CapEx and turnover are much higher than the rule assumes

C. The worksheet ignores rent

D. Cheap houses have no property taxes

16. 5 pts

In this example, a rental's NOI is $15,600. You want $100 a month of cash flow, will put 25% down, and a 7%, 30-year loan costs $0.0066530 a month per dollar borrowed. What is the highest price you should offer?

A. About $180,400

B. About $260,500

C. About $225,500

D. About $240,500

17. 5 pts

A lender requires a DSCR of 1.25. To find the most you can borrow, what is the first step?

A. Divide NOI by 1.25 to find the maximum annual debt service

B. Multiply NOI by 1.25

C. Divide the price by 1.25

D. Multiply gross rent by 1.25

18. 5 pts

In this example, a deal shows +$90 a month as entered, but −$60 a month with rent 10% lower, and its DSCR is 1.10. Your written criteria are $100 a month and DSCR 1.25. The best verdict is:

A. Buy at the asking price, since it cash-flows today

B. Buy, and plan to raise the rent after closing

C. Negotiate to a price that meets your criteria, or walk away

D. Lower the vacancy assumption until it meets your criteria

19. 5 pts

An analyst changes vacancy from 6% to 2% "because the house is rented right now." This is best described as:

A. A conservative assumption

B. A massaged input not supported by evidence

C. Required by the 50% rule

D. Correct whenever a lease is in place

20. **5 pts**

In this example, a house's market rent is $2,000, but the current tenant pays $1,700 under a lease with 6 months left. What is the first year's scheduled rent if you raise it to market when the lease ends?

A. $24,000

B. $20,400

C. $23,100

D. $22,200

ANSWER KEY

1. C. $(\$2{,}400 + \$100) \times 12 = \$30{,}000$. A counts the rent but forgets the laundry; GSI includes dependable other income.
2. A. Economic vacancy is every dollar of GSI not collected for any reason. B describes physical vacancy, which is always equal to or smaller than economic vacancy.
3. B. The mortgage payment is debt service, subtracted after NOI to find cash flow. Putting it inside operating expenses makes NOI and the cap rate wrong.
4. D. EGI $\$30{,}000 \times 0.95 = \$28{,}500$; $\$28{,}500 \times 0.08 = \$2{,}280$. A applies 8% to scheduled rent, the convention some other tools use but not this one.
5. A. A component-by-component budget captures the roof, furnace, water heater, floors, appliances and paint. B ignores certain wear; C and D measure small repairs, not replacements.
6. C. A new roof lowers the near-term risk but not the yearly wear, and the furnace, water heater, flooring and appliances still need reserves. A is the classic beginner's mistake.
7. B. NOI $\$28{,}500 - \$11{,}400 = \$17{,}100$; $\$17{,}100 \div \$285{,}000 = 6.0\%$. D divides EGI by price, forgetting the expenses.
8. D. Cash invested $\$60{,}000$; $\$2{,}400 \div \$60{,}000 = 4.0\%$. A divides by the down payment alone and overstates the return.
9. A. DSCR is NOI ÷ debt service; below 1.00 the property's income falls short of the payments, and many lenders commonly want 1.20–1.25 or more. C confuses DSCR with occupancy.
10. C. Break-even occupancy is (operating expenses + debt service) ÷ GSI. At 97%, a few weeks of vacancy or one unpaid month pushes the property into a loss.
11. B. This is negative leverage: borrowed money costs 8.0% a year but the property earns 5.5% on it. Leverage helps only when the cap rate exceeds the loan constant; the cap rate itself does not change (D).
12. D. $\$1{,}900 \div (\$180{,}000 + \$20{,}000) = 0.95\%$. A leaves the repairs out of the denominator.
13. A. The rule estimates that vacancy plus every operating expense takes about half of gross rent; you subtract principal and interest separately. B double-counts the mortgage.

14. C. $\$300{,}000 \times 0.70 - \$50{,}000 = \$160{,}000$. A forgets to subtract the rehab; B and D use 75% and 65%.
15. B. Low-priced houses often carry high vacancy, repair and turnover costs that a rent-to-price screen cannot see. The rule is a useful screen (so A goes too far), not a verdict.
16. D. Max debt service $\$15{,}600 - \$1{,}200 = \$14{,}400$, $\$1{,}200$ a month; loan $\$1{,}200 \div 0.0066530 \approx \$180{,}369$; price $\$180{,}369 \div 0.75 \approx \$240{,}492$. A stops at the loan amount.
17. A. Maximum debt service is NOI ÷ required DSCR; then convert the monthly payment to a loan amount. B would let the payments exceed the income.
18. C. The deal fails both written criteria and a realistic stress. Solve backward for a qualifying price; if the seller will not accept it, walk away. D is massaging inputs.
19. B. Every tenant eventually leaves, and turnover brings vacancy and credit loss. Lowering vacancy without local data is massaging the numbers to make a deal look better.
20. D. $\$1{,}700 \times 6 + \$2{,}000 \times 6 = \$10{,}200 + \$12{,}000 = \$22{,}200$. A assumes market rent all year; the lease must run its term.

PORTFOLIO PIECE: DEAL BINDER: ANALYZING A RENTAL DEAL

This unit fills the first real section of your deal binder. File the Income Sheet (3.1) and the Expense Build with its CapEx table (3.2) for your first listing; the Four Squares page with its printed Rental worksheet and first verdict (3.3); the Twenty-Listing Screen spreadsheet with three full worksheets and your note on how well the rules of thumb fit your market (3.4); and the capstone of the unit, Three Full Deals (3.5) — each with its summary page, printed worksheet, stress-test results, backward-solved offer price and written verdict.

A parent or mentor reviews the binder with the rubric below and asks you to defend one verdict aloud. A careful walk-away earns the same credit as a deal you would buy: the skill being graded is judgment, not optimism.

LOOK FOR	WHAT IT MEANS
Evidence-based income	Every rent comes from at least three named comps, vacancy is supported by local data or a turnover estimate, and only dependable other income is counted.
Complete, honest expenses	Taxes are estimated after reassessment, insurance is a landlord-policy figure, CapEx comes from a component table, management is included, and nothing is left at zero without a stated reason.
Correct calculations	NOI, cash flow, cap rate, cash-on-cash, DSCR and break-even occupancy are worked by hand with formulas shown and match the printed Deal Analyzer worksheet to the dollar.
Stress test and offer price	Each full deal shows the five single-change stress results, at least one combined stress, and a maximum offer solved backward from written criteria and checked in the tool.
Defended verdicts	Each verdict — buy, negotiate to a stated price, or walk away — cites at least four numbers, names the riskiest assumption, and gives an honest counter-offer rationale where one applies.

UNIT 4

Financing the Small Investor

In 1906, with San Francisco still smoking, A. P. Giannini set a plank across two barrels and lent money to neighbors who wanted to rebuild. Every loan since has asked his questions: who is borrowing, against what, on what terms, and can it be repaid? This unit teaches you how small investors borrow — and when they should not. You will learn why most lenders follow the rulebooks of **Fannie Mae** and **Freddie Mac**, and what those rules require of **investment-property loans** as of 2026: larger down payments, **reserves**, a limit on financed properties, and only part of the rent counted toward **debt-to-income**. You will see why **owner-occupant loans** — FHA, VA and conventional — offer far better terms on one to four units to people who truly live there, and why lying about occupancy is a crime.

Then you will meet the lenders beyond the standard rulebooks: **DSCR loans** that qualify the property instead of your paycheck, **portfolio** and **commercial** loans from local banks, **seller financing**, family **private money** and short-term **hard money**. Finally you will learn when a **refinance**, a cash-out or a **home equity line** makes sense, and what money really costs. Every loan rule here is labeled with its source and "as of 2026" because rules change; every rate is an example. And every lesson presents both the case for careful, limited debt and the case for paying cash, so your family can decide.

PREREQUISITES

- Can compute NOI, debt service, cash flow, cash-on-cash and DSCR, and run the Rental worksheet (Unit 3)
- Can use the loan payment formula or the Deal Analyzer to find a monthly principal-and-interest payment
- Has at least three analyzed properties with printed worksheets and verdicts in the deal binder
- Can explain leverage, reserves and the borrower's burden from Lesson 1.2

MASTERY CHECKLIST

- ☐ I can state Fannie Mae's 2026 investment-loan limits — maximum LTV, reserves, financed-property count and DTI — and say where to check them.
- ☐ I can compute net rental income for qualifying (75% of rent minus PITIA), a borrower's DTI and the total cash needed to close, including reserves.
- ☐ I can compare two Loan Estimates and compute the break-even for discount points.
- ☐ I can state FHA, VA and conventional owner-occupant rules for one to four units as of 2026, apply FHA's self-sufficiency test, and explain why occupancy fraud is a crime.
- ☐ I can compute a property's DSCR the lender's way and the true way, and find the largest loan allowed by a DSCR and an LTV limit.
- ☐ I can compute balloon balances and the true cost of hard money, and set out the written terms and recorded security every private loan needs.
- ☐ I can compute a refinance's break-even, a cash-out's proceeds and the effective cost of the new money, and a HELOC's available line and payment.
- ☐ I can explain the due-on-sale clause, recourse debt, subject-to

risks and the opportunity cost of money, and present both the moderate-debt and no-debt views fairly.

OPTIONAL BOOKS AND RESOURCES FOR THIS UNIT

- **School Launch Deal Analyzer**: Free. Change the down payment, rate, mortgage insurance and closing costs on the Rental and House hack worksheets, and the short-term financing and refinance inputs on the BRRRR and Fix & flip worksheets, to see how each loan changes a deal. Used in every lesson. Ages 13 and up.
- **CFPB: Loan Estimate explainer**: Free, official. The Consumer Financial Protection Bureau's interactive guide to every line of the three-page Loan Estimate, with a sample form. Use it for the Lesson 4.1 project. Ages 14 and up.
- **HUD: Single Family Housing Policy Handbook 4000.1**: Free, official. The page where HUD posts the current FHA rulebook (a long PDF updated through 2026). Use its search to find the minimum down payment, occupancy, rental-income and three- to four-unit self-sufficiency rules taught in Lesson 4.2, and check every FHA figure against it before relying on it. Ages 15 and up, with a parent.
- **CFPB: What is a home equity line of credit (HELOC)?**: Free, official. A short, plain explanation of how HELOCs work, including draw periods, variable rates and the risk to your home. Read it before the Lesson 4.5 project. Ages 14 and up.
- **Small and Mighty Real Estate Investor, by Chad Carson (BiggerPockets Publishing)**: A printed book from the publisher's own store. Chad Carson argues for a small, carefully financed portfolio and explains seller financing, local-bank loans and paying debt down — a thoughtful companion to Lessons 4.3–4.5. Ages 15 and up.

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LESSONS IN THIS UNIT

4.1 Investment-Property Loans: Down Payments, Reserves and Qualifying

3 sessions of 50 minutes

4.2 Owner-Occupant Loans on One to Four Units 3 sessions of 50 minutes

4.3	**DSCR Loans, Portfolio Lenders and Local Banks**	3 sessions of 50 minutes
4.4	**Seller Financing, Private Money and Hard Money**	3 sessions of 50 minutes
4.5	**Refinancing, HELOCs and the Cost of Money**	3 sessions of 50 minutes

Unit 4 test

Closed notes and closed notebook; a basic calculator is allowed. Twenty four-choice questions, 5 points each, 100 points total. Allow about two minutes per question — set a timer for 40 minutes. Show the arithmetic for every calculation question on scratch paper, and choose the one BEST answer. Aim for 80% (16 of 20) or better, and rework every miss in your investor's notebook. Loan rules are stated as of 2026 from Fannie Mae, HUD and VA sources and may change; figures marked "in this example" are examples, and real rates, fees and limits vary by lender and year.

1. **5 pts**

   Why do most lenders follow Fannie Mae's or Freddie Mac's rules when making conventional loans?

   A. Federal law requires every mortgage to meet their rules

   B. Lenders plan to sell the loans to them, so the loans must meet their standards

   C. They insure every conventional loan against default

   D. They set the interest rate on every loan

2. **5 pts**

   As of 2026, Fannie Mae's Eligibility Matrix allows a maximum LTV of 85% on a one-unit investment purchase. What is the minimum down payment on a $260,000 single-family rental?

   A. $65,000

   B. $9,100

   C. $13,000

   D. $39,000

3. 5 pts

How do lenders following Fannie Mae's 2026 guide commonly count rent from a rental being purchased?

A. 75% of gross rent, minus the property's full PITIA

B. 100% of gross rent added to income

C. Only rent already received for two years

D. NOI from the buyer's own worksheet

4. 5 pts

In this example, the appraiser's market rent on a rental being bought is $2,200 and its PITIA is $1,800. How does the lender treat it?

A. +$400 added to income

B. +$1,650 added to income

C. −$150 counted as a monthly debt

D. It is ignored

5. 5 pts

In this example, an investment purchase has PITIA of $1,700, and the buyer owns two other financed rentals with combined balances of $200,000. Using Fannie Mae's 2026 reserve rules, what reserves are required?

A. $10,200

B. $14,200

C. $4,000

D. $20,400

6. 5 pts

In this example, paying $3,000 in discount points lowers a monthly payment by $50. What is the break-even?

A. 30 months

B. 50 months

C. 6 months

D. 60 months

7. 5 pts

Which statement about FHA loans is correct as of 2026, according to HUD's handbook?

A. With a credit score of 580 or higher, the maximum LTV on a purchase is 96.5%, and a borrower must occupy the home

B. FHA loans may be used for investment properties of up to four units

C. FHA loans require 20% down on duplexes

D. FHA loans carry no mortgage insurance

8. 5 pts

A buyer applies for an owner-occupant loan on a fourplex, certifying he will live there, while planning to rent all four units and never move in. This is:

A. A common and acceptable strategy

B. Allowed if he moves in within five years

C. Occupancy fraud, a knowingly false statement on a loan application

D. Allowed if the units cash-flow

9. 5 pts

In this example, an FHA fourplex has fair market rent of $1,250 per unit (appraiser's vacancy and maintenance estimate 20%) and PITI of $4,000. How does it fare on the self-sufficiency test?

A. Passes at 80%

B. Fails at about 107%

C. Passes at about 94%

D. Fails at 125%

10. 5 pts

According to va.gov, which is true of a VA-backed purchase loan?

A. It requires 3.5% down

B. It can be used for investment properties the veteran does not occupy

C. It is limited to single-family homes

D. It can require no down payment if the price is not above the appraised value, and the veteran must live in the home

11. 5 pts

Under the Homeowners Protection Act, when must a lender automatically end PMI on a conventional loan that is current?

A. When the balance is scheduled to reach 78% of the home's original value

B. After five years

C. When the balance reaches 90% of value

D. Never; PMI lasts for the life of the loan

12. 5 pts

A DSCR lender approves a rental because rent ÷ PITIA is 1.30, but the investor's own NOI ÷ debt service is 0.96. What is the best conclusion?

A. The property will cash-flow, because the lender approved it

B. The lender made an arithmetic error

C. The lender's ratio ignores vacancy and operating costs; the property will likely lose money

D. DSCR does not matter for small rentals

13. 5 pts

In this example, a property's NOI is $24,000. A bank requires DSCR 1.20 at 7% for 30 years ($0.0066530 per month per dollar) and lends no more than 75% of a $320,000 appraisal. How much will it lend?

A. About $250,500

B. $240,000

C. $288,000

D. $200,000

14. 5 pts

A five-unit building is financed with a commercial loan amortized over 25 years with a 5-year term. What is the main risk the owner must plan for?

A. The payment will rise every month

B. The loan cannot be prepaid

C. The interest is not deductible

D. A large balloon comes due in year 5 and must be refinanced or paid, possibly at higher rates

15. 5 pts

An investor's bank loan is recourse, with a personal guarantee. If the property is foreclosed and sells for less than the debt, what can happen?

A. The lender may pursue the investor's other assets for the shortfall

B. The debt is automatically forgiven

C. The lender can take only the property

D. The investor's LLC absorbs all losses

16. 5 pts

A seller with an existing mortgage offers to finance your purchase herself and "keep paying her loan." What is the most important risk?

A. The interest rate will be too low

B. Seller-financed loans cannot have balloons

C. Her mortgage's due-on-sale clause may let her lender demand full payment after the sale

D. You cannot record the deed

17. 5 pts

In this example, a hard-money loan of $120,000 at 12% interest-only runs 6 months, with 2 points and $1,000 of fees. What is the total borrowing cost?

A. $7,200

B. $10,600

C. $9,600

D. $14,400

18. 5 pts

A grandparent offers to lend you $40,000 toward a rental. What is the best practice?

A. Keep it informal to protect the relationship

B. Promise to repay "when the property sells"

C. Take the money as a gift and say nothing

D. Sign a promissory note with clear terms, secure it with a recorded deed of trust or mortgage, and name the lender on the insurance

19. 5 pts

In this example, a refinance costs $4,800 and lowers the payment by $150 a month. What is the break-even?

A. 32 months

B. 48 months

C. 15 months

D. 24 months

20. 5 pts

A family considers a variable-rate HELOC on its home to fund the down payment on a rental that cash-flows $100 a month. What is the greatest risk?

A. HELOCs cannot be used for real estate

B. HELOC interest is always higher than 20%

C. The family home secures the debt, and a rising rate could turn the deal into a monthly loss

D. The rental's cap rate will fall

ANSWER KEY

1. B. Fannie Mae and Freddie Mac buy loans in the secondary market, so lenders write loans to their guides in order to sell them. Portfolio and DSCR lenders, who keep or sell loans elsewhere, set their own rules — so A is false.
2. D. $\$260{,}000 \times 15\% = \$39{,}000$. A is 25%, the two- to four-unit investment minimum; B and C are owner-occupant figures (3.5% and 5%).
3. A. The lender takes 75% of the lease or appraiser's market rent and subtracts PITIA; a positive result adds to income and a negative one counts as debt. B ignores vacancy and expenses entirely.
4. C. $0.75 \times \$2{,}200 - \$1{,}800 = \$1{,}650 - \$1{,}800 = -\$150$, which is added to monthly debts. A uses 100% of the rent.
5. B. Six months of PITIA, $\$10{,}200$, plus $2\% \times \$200{,}000 = \$4{,}000$ for other financed properties: $\$14{,}200$. A forgets the other properties.
6. D. $\$3{,}000 \div \$50 = 60$ months. If you expect to sell or refinance within five years, the points do not pay.
7. A. That is the 3.5% minimum down payment, and at least one borrower must move in within 60 days and intend to stay a year. FHA charges upfront and annual premiums, so D is false.
8. C. Misstating occupancy to get owner-occupant terms is mortgage fraud and a federal crime. Moving out after genuinely living there for the required period is a different, lawful matter.
9. B. Net income $\$5{,}000 - 25\% \times \$5{,}000 = \$3{,}750$ (the greater of 20% or 25%); $\$4{,}000 \div \$3{,}750 \approx 107\%$, above the 100% limit. A divides by gross rent without the deduction.
10. D. VA loans can have no down payment and no PMI, may carry a funding fee, cover homes of up to four units, and require occupancy. C is wrong: up to four units are allowed.
11. A. Borrowers may request cancellation at 80% of original value, and it ends automatically at 78% on schedule. FHA mortgage insurance follows different rules.
12. C. Many DSCR lenders compare rent with PITIA, leaving out vacancy, repairs, CapEx and management. The NOI-based figure below 1.00 means the income does not cover the payment.
13. B. DSCR limit: $\$24{,}000 \div 1.20 \div 12 = \$1{,}666.67$ a month, $\div 0.006653 \approx \$250{,}513$. LTV limit: $\$240{,}000$. The bank lends the lesser. A ignores the LTV cap.

14. D. Most of the principal remains after five years. If rates rise or NOI falls, refinancing may require more cash or fail.
15. A. Recourse means personal liability beyond the property. C describes a non-recourse loan.
16. C. Under the Garn–St Germain Act of 1982, due-on-sale clauses are generally enforceable, so the sale can trigger her loan. Seller financing is cleanest when the seller owns free and clear.
17. B. Interest $\$120{,}000 \times 0.12 \div 12 \times 6 = \$7{,}200$, points $\$2{,}400$, fees $\$1{,}000$: $\$10{,}600$. A counts interest only.
18. D. Written terms and recorded security protect both the lender and the relationship. A handshake loan invites misunderstanding and leaves the lender unprotected.
19. A. $\$4{,}800 \div \$150 = 32$ months. The refinance pays only if the owner keeps the loan longer than that — and the term reset must be considered too.
20. C. If the rental fails or rates rise, the family must pay from wages, and the debt is secured by the house it lives in. The HELOC's cost must be compared honestly with the deal's return.

PORTFOLIO PIECE: DEAL BINDER: FINANCING THE SMALL INVESTOR

This unit adds a financing section to your deal binder. File the Lender's File (4.1) with its DTI, reserve and Loan Estimate calculations; the House-Hack Financing Sheet (4.2) with House hack worksheets at two down payments and, for three or four units, the FHA self-sufficiency test; Three Ways to Borrow (4.3) comparing conventional, DSCR and portfolio terms with both DSCR calculations; Three Term Sheets (4.4) for seller financing, a family loan and hard money with a delayed-project case; and the Refinance Decision (4.5) with break-even, cash-out cost and HELOC calculations.

Each item ends with a verdict a parent can question aloud: would a lender approve this, should the borrower accept it, and what would you refuse? Credit goes to clear, honest reasoning — including the decision not to borrow.

LOOK FOR	WHAT IT MEANS
Rules stated accurately	Every loan rule (LTV, reserves, DTI, occupancy, self-sufficiency, seasoning) is stated correctly, labeled "as of 2026" with its source, and every rate or fee is labeled an example.
Correct calculations	Net rental income, DTI, reserves, payments, balloons, break-even months, hard-money cost, cash-out proceeds and HELOC lines are worked by hand and agree with the Deal Analyzer where it applies.
True coverage, not just approval	Each financing option is judged by NOI-based DSCR and cash flow after all costs, not merely by whether a lender would approve it.
Risk and honesty	Balloons, variable rates, recourse, due-on-sale, occupancy and securities issues are identified where they apply, and every private or seller arrangement is written and secured.
Defended verdicts	Each verdict weighs the moderate-debt and no-debt views fairly, cites the numbers, and says plainly what the student would do and refuse.

UNIT 4 · FINANCING THE SMALL INVESTOR · LESSON 4.1 OF 50 · 3 SESSIONS OF 50 MINUTES

4.1 Investment-Property Loans: Down Payments, Reserves and Qualifying

OBJECTIVES

- Explain why most conventional loans follow Fannie Mae and Freddie Mac rules, and why investment-property loans cost more and require more down than loans on a home you live in.
- State, as of 2026 and labeled as such, Fannie Mae's maximum loan-to-value ratios, minimum reserves and financed-property limit for investment purchases.
- Compute how a lender counts rental income (75% of gross rent minus the payment) and a borrower's debt-to-income ratio.
- Compute the total cash an investor needs to close, including down payment, closing costs and required reserves.
- Read and compare two Loan Estimates, including the break-even point for paying discount points.

> **Warm-up.** Five minutes. A friend asks to borrow $100 and promises to pay it back. Write three questions you would ask before saying yes. Then imagine lending $200,000 to a stranger for thirty years. Add three more questions. A mortgage lender asks all of them, in writing.

WATCH

The Beginner's Guide to Financing Rental Properties

BiggerPockets · 20:56

https://www.youtube.com/watch?v=u2A4znB7Dfk

> **WHEN TO WATCH**
> Watch 3:22–6:08 (conventional loans) after the third core idea, and the rest after the fifth. List each of the four loan types he describes and, beside each, one advantage and one risk.

BACKUP VIDEO

Schedule E - How Is Rental Income Calculated For A Mortgage?

The Mortgage Musketeer · 7:54

https://www.youtube.com/watch?v=_NKYCulfJtM

A loan officer walks through a real Schedule E to show how a lender turns a tax return into qualifying rental income. Watch after the fourth core idea and note which expenses a lender adds back and why.

KEY TERMS

conventional loan

A mortgage not insured or guaranteed by a federal agency, usually written to Fannie Mae or Freddie Mac standards so it can be sold.

investment property

A property the borrower does not occupy as a home and holds to earn rent or profit.

debt-to-income ratio (DTI)

A borrower's total monthly debt payments divided by gross monthly income.

secondary mortgage market

The market in which lenders sell mortgages they have made, freeing cash to lend again.

loan-to-value ratio (LTV)

The loan amount divided by the property's price or appraised value, whichever is lower.

PITIA

Principal, interest, taxes, insurance and association dues — the full monthly housing payment lenders use.

reserves

Liquid assets a borrower must still have after closing, measured in months of the property's payment.

net rental income

For qualifying, a percentage of gross rent (commonly 75%) minus the property's PITIA; positive income adds to earnings and a loss counts as debt.

financed property

A one- to four-unit residential property on which the borrower is personally obligated on a mortgage, counted toward a lender's limit.

Loan Estimate

The standard three-page federal disclosure a lender must give within three business days of an application, showing the rate, payment and closing costs.

discount points

Upfront fees, each equal to 1% of the loan, paid to lower the interest rate.

automated underwriting

Software (such as Fannie Mae's Desktop Underwriter) that evaluates a loan application against an agency's rules.

CORE IDEAS

The story. In 1938, in the depths of the Depression, Congress amended the National Housing Act to create the Federal National Mortgage Association, known today as **Fannie Mae**. Banks and building-and-loan associations had stopped lending because their money was tied up in long mortgages they could not sell. Fannie Mae's job was to buy home loans insured by the new Federal Housing Administration, handing local lenders fresh cash to lend again. It worked, and it changed American lending for good. In 1968 Congress turned Fannie Mae into a privately owned company, and in 1970 it was allowed to buy ordinary **conventional loans**, while a new company, Freddie Mac, was created to compete with it. Today, when a lender quotes you a conventional mortgage, it is very likely planning to sell that loan to one of the two — which means it must follow their rulebooks to the letter.

How they figured it out. A **secondary mortgage market** only works if the loans in it are alike enough to judge from a distance. So Fannie Mae and Freddie Mac wrote uniform notes and mortgages, uniform appraisal forms and long guides of underwriting rules, and in the 1990s they began checking applications with **automated underwriting** software. Experience taught them that loans on **investment**

properties carry more risk than loans on homes: when money gets tight, owners protect the roof over their own heads first and walk away from rentals sooner. The rules answer that risk in four ways. Investors must put more money down, keep more cash in **reserves**, pay higher prices (rates and fees), and count only part of their rent when proving they can repay. Learning those rules is how you learn what a lender will and will not do before you ever apply.

The big idea. A conventional investment loan is a loan on a property you will not live in, underwritten mostly on *your* income, credit and cash. As of 2026, Fannie Mae's Eligibility Matrix allows a maximum **loan-to-value ratio** of 85% for a one-unit investment purchase (at least 15% down) and 75% for two to four units (at least 25% down) on loans run through its automated system; mortgage insurance applies above 80% LTV. Its Selling Guide requires at least six months of reserves for an investment-property transaction, plus extra reserves for your other financed properties: 2% of their loan balances if you have one to four, 4% for five or six, and 6% for seven to ten. A borrower may have at most ten **financed properties** for second-home or investment loans, and the count includes the home you live in. Rates on investment loans are commonly higher than on owner-occupied loans. Lenders may add stricter rules of their own; ask.

Lenders measure ability to repay with the **debt-to-income ratio (DTI)**: all monthly debt payments divided by gross monthly income. As of 2026, Fannie Mae's guide caps DTI at 50% for loans approved by its automated system and 36% (up to 45% with strong credit and reserves) for manually underwritten loans. Rent counts, but not all of it. For a property being bought, the lender takes **75% of the gross monthly rent** — from a lease or the appraiser's rent schedule — and subtracts the property's full **PITIA** (principal, interest, taxes, insurance and association dues). If the result, **net rental income**, is positive, it is added to income; if negative, it counts as a debt. One more rule matters to beginners: if you have less than twelve months of experience managing rentals, positive rental income can only offset the property's own payment, not add to your income. Lenders want proof you can be a landlord before they lean on your rents.

Every lender must hand you a **Loan Estimate** within three business days of your application — the same three-page federal form everywhere, so you can compare offers line by line. Page 1 shows the loan amount, rate, monthly principal and interest, any prepayment penalty or balloon, and estimated cash to close. Page 2

itemizes closing costs: section A is the lender's own charges, including **discount points** (each point is 1% of the loan, paid to buy a lower rate); section B is services you cannot shop for; section C is services you can. Page 3 shows the APR and how much you will have paid after five years. Compare estimates requested the same day, since rates move daily. A point is worth buying only if you will keep the loan past its break-even: the cost of the points divided by the monthly payment saved. Investors often refinance or sell within a few years, so points frequently do not pay.

Qualifying for a loan does not mean you should take it. The lender asks whether *you* can repay from all your income; the investor must also ask whether *the property* pays its own way. A borrower can easily qualify for a rental that loses money every month and then carry the loss from a paycheck. Remember, too, Proverbs' warning that the borrower is servant to the lender. Many careful families invest slowly with large down payments or pay off rentals early, accepting lower growth for lower risk — the view associated with teachers such as Dave Ramsey. Others use modest, fixed-rate, long-term debt on properties that cash-flow with a margin, backed by real reserves. Both are honest positions. What is never wise is borrowing as much as the rules allow just because the rules allow it, or treating reserves as optional because the lender's minimum seems small.

Run the numbers. In the Rental worksheet, the loan lives in four inputs: **Down payment** (the tool starts at 25%; try 15% for a one-unit investment loan and watch cash invested fall and debt service rise), **Interest rate** (use an example investor rate, commonly somewhat above owner-occupied rates), **Mortgage insurance** (needed above 80% LTV; ask for the lender's figure) and **Buyer closing costs** (take them from page 2 of the Loan Estimate, including any points). The tool's "Total cash needed" does not include reserves, so add six months of PITIA and any other-property reserves yourself. A careful investor gets two or three Loan Estimates the same day and checks the deal at the highest rate quoted. The classic mistakes: using an owner-occupied rate for a rental; forgetting reserves in the cash needed; assuming all the rent counts toward qualifying; paying points on a loan you will refinance soon; and treating loan approval as proof the deal is good.

PICTURE STUDY



Customers inside Washington Mutual Savings Bank, Seattle, Unknown photographer (probably Asahel Curtis), c. 1923 · Photograph · Museum of History and Industry (MOHAI), Seattle

Image: Wikimedia Commons, public domain

This photograph shows a winter day about 1923 in the lobby of Washington Mutual Savings Bank at 1101 Second Avenue in Seattle. The bank had begun in 1889 as a building-and-loan association, formed just after the Great Seattle Fire while the city was rebuilding. For decades, savings banks like this one took in the savings of ordinary families and lent them out as mortgages, keeping the loans on their own books. Long after this picture was taken, Washington Mutual grew into a giant lender — and on September 25, 2008, regulators seized it in the largest bank failure in American history, after years of risky home lending. It opens this lesson because lending rules exist for a reason: loans that look safe in good years are tested in bad ones.

Look closely

- Look at the people in line. What might each of them be doing at a savings bank in 1923?
- Find the clock. Why might a bank want time to be so visible?
- Notice the marble columns, coffered ceiling and solid counters. What were the builders trying to make customers feel?
- Compare this lobby with how people bank today. What has changed, and what has stayed the same?

Talk about it

1. A bank that began by lending carefully to rebuild a burned city ended by failing from risky lending. What changed — the rules, the people, or both?
2. Why might a lender reasonably ask an investor for more cash and more reserves than a family buying its own home?
3. The psalmist says the wicked borrow and do not repay. How do honest borrowing and careful lending both serve the neighbor whose savings are on deposit?

PROJECT

The Lender's File

You will see a rental purchase through a lender's eyes. Using a pretend borrower (your parent can help invent a realistic profile, or use the one below), you will compute the down payment, net rental income, DTI and reserves for one of your deal-binder properties, then compare two example Loan Estimates. Use the CFPB's sample Loan Estimate and published average rates, labeled as examples; do not request real quotes or give anyone personal information.

You will need

- One property from your Unit 3 deal binder with its Rental worksheet
- A pretend borrower profile: for example, gross income $7,000 a month, home PITIA $1,800, car $300, one existing rental with a $120,000 loan
- The CFPB's Loan Estimate explainer and sample form
- The School Launch Deal Analyzer, a calculator and your deal binder

Steps

1. Compute the minimum down payment for your property under Fannie Mae's 2026 limits (15% for one unit, 25% for two to four) and the loan amount.
2. Find P&I at an example investor rate (enter it in the Rental worksheet) and build the PITIA from your taxes and insurance.
3. Compute net rental income using 75% of your market rent, and the pretend borrower's DTI. Does it fall under 50%?
4. Compute required reserves (six months of PITIA plus 2% of the other rental's loan balance) and total cash needed to close.
5. Write two example Loan Estimates on paper — one with no points and one a quarter to half a point lower in rate with points — and compute the break-even months.
6. Change the Rental worksheet's down payment from 25% to 15%, record what happens to cash invested, cash flow, cash-on-cash and DSCR, and add mortgage insurance if the LTV is above 80%.

7. Print both worksheets and write a verdict: would a lender approve this borrower, and should this borrower take the loan? Explain why those can be different answers. File it in your deal binder.

INVESTOR'S NOTEBOOK

1. Flashcards for conventional loan, secondary market, investment property, LTV, DTI, PITIA, reserves, net rental income, financed property, Loan Estimate, discount points and automated underwriting.
2. Draw a one-page "2026 investor loan card" with Fannie Mae's limits — 85% LTV one unit, 75% two to four, six months' reserves, 2%/4%/6% for other properties, ten financed properties, 50% DTI — and the words "as of 2026: check the current guide."
3. Trap list: owner-occupied rate on a rental; reserves left out of cash needed; 100% of rent counted; points on a short hold; approval mistaken for a good deal.

KEY FORMULAS

$$\text{LTV} = \frac{\text{loan amount}}{\text{lesser of price or appraised value}} \qquad \text{Minimum down} = \text{price} \times (1 - \text{max LTV})$$

$$\text{DTI} = \frac{\text{total monthly debt payments}}{\text{gross monthly income}}$$

$$\text{Net rental income} = 0.75 \times \text{gross monthly rent} - \text{PITIA}$$

$$\text{Required reserves} = 6 \times \text{PITIA} + 2\% \times \text{other financed loan balances (1–4 properties)}$$

$$\text{Points break-even (months)} = \frac{\text{cost of points}}{\text{monthly payment saved}}$$

From history. Fannie Mae and Freddie Mac grew to stand behind a large share of all U.S. home loans. When home prices fell and defaults soared, the Federal Housing Finance Agency placed both companies into government conservatorship on September 7, 2008 — one of the most sweeping federal interventions in private financial markets in decades. Their rulebooks, tightened after that crisis, are the rules your lender follows today.

Example 1. In this example, a borrower earns $6,500 a month and pays $1,600 PITIA on her home, $350 on a car and $200 on a student loan. She wants a $240,000 single-family rental with 25% down at 7.5% for 30 years; taxes are $250 and insurance $110 a month, and the appraiser's market rent is $2,000. Find the net rental income and her DTI.

Show solution

1. Loan $180,000; P&I at 7.5% for 30 years $= \$1{,}258.59$; PITIA $\$1{,}258.59 + \$250 + \$110 = \$1{,}618.59$
2. Net rental income: $0.75 \times \$2{,}000 - \$1{,}618.59 = \$1{,}500 - \$1{,}618.59 = -\$118.59$
3. The negative amount counts as a monthly debt: $\$1{,}600 + \$350 + \$200 + \$118.59 = \$2{,}268.59$
4. DTI: $\$2{,}268.59 \div \$6{,}500 \approx 34.9\%$

Answer: Net rental income is $-\$118.59$ and DTI about 34.9%, within Fannie Mae's 2026 limits. She qualifies — but notice the lender has just told her the rent will not fully cover the payment.

Example 2. For the same purchase ($60,000 down, closing costs $6,000 in this example, PITIA $1,618.59), she also owns one other rental with a $150,000 loan balance. Using Fannie Mae's 2026 reserve rules, how much cash must she show?

Show solution

1. Subject-property reserves: $6 \times \$1{,}618.59 = \$9{,}711.54$
2. Other financed properties (1–4 owned): $2\% \times \$150{,}000 = \$3{,}000$ (her own home's loan is not included in this balance)
3. Total reserves: $\$9{,}711.54 + \$3{,}000 = \$12{,}711.54$
4. Total cash: $\$60{,}000 + \$6{,}000 + \$12{,}711.54 = \$78{,}711.54$

Answer: She needs about $78,700 in verified funds — far more than the down payment alone. The reserves stay in her accounts after closing, which is exactly where a careful investor wants them.

Example 3. In this example, two Loan Estimates arrive the same day for a $180,000 30-year investment loan: Offer A at 7.25% with no points, Offer B at 6.875% with 1.5 points. Which is better if she expects to keep the loan five years? Ten?

Show solution

1. Offer A P&I: $1,227.92; Offer B P&I: $1,182.47; savings $45.45 a month
2. Cost of points: $1.5\% \times \$180{,}000 = \$2{,}700$
3. Break-even: $\$2{,}700 \div \$45.45 \approx 59.4$ months, almost exactly five years
4. Five years: about even. Ten years: B saves roughly $\$45.45 \times 120 - \$2{,}700 \approx \$2{,}754$

Answer: For a five-year hold the points barely pay for themselves; for a ten-year hold Offer B wins. If she might refinance or sell sooner, Offer A keeps $2,700 in her reserves.

PRACTICE

1. Easy Under Fannie Mae's 2026 limits, what is the minimum down payment on a $200,000 one-unit investment property, and on a $200,000 duplex bought as an investment?

   Show answer

   One unit: 85% LTV, so $\$200{,}000 \times 15\% = \$30{,}000$. Duplex: 75% LTV, so $50,000. Lenders may require more.

2. Easy A lender uses the 75% convention. How much of an $1,800 market rent counts toward qualifying before the payment is subtracted?

   Show answer

   $0.75 \times \$1{,}800 = \$1{,}350$. The 25% held back allows for vacancy and expenses.

3. Easy In this example, a borrower's monthly debts total $2,700 and gross income is $6,000. What is the DTI?

   Show answer

   $\$2{,}700 \div \$6{,}000 = 45\%$.

4. **Medium** In this example, a rental's market rent is $1,600 and its PITIA is $1,350. What is the net rental income for qualifying, and how is it used?

   Show answer

   $0.75 \times \$1{,}600 - \$1{,}350 = -\$150$. The $150 loss is added to monthly debts.

5. **Medium** Under Fannie Mae's 2026 minimum, how much in reserves must a borrower show for an investment purchase with PITIA of $1,500, ignoring other properties?

   Show answer

   $6 \times \$1{,}500 = \$9{,}000$, still in the bank after closing.

6. **Medium** In this example, an investor buying another rental already owns three financed rentals with balances of $120,000, $150,000 and $90,000, plus a mortgaged home. Using the 2026 rule for one to four financed properties, what additional reserves apply?

   Show answer

   $2\% \times (\$120{,}000 + \$150{,}000 + \$90{,}000) = 2\% \times \$360{,}000 = \$7{,}200$. The home's loan is not included in this balance.

7. **Medium** A Loan Estimate shows 1.25 points on a $200,000 loan. What do the points cost, and where on the Loan Estimate will you find them?

   Show answer

   $1.25\% \times \$200{,}000 = \$2{,}500$, listed in section A (origination charges) on page 2.

8. **Hard** In this example, a first-time investor with no landlord history buys a rental with market rent $2,000 and PITIA $1,400. What happens to the positive net rental income?

   Show answer

   $0.75 \times \$2{,}000 - \$1{,}400 = +\$100$. With less than twelve months of management experience, it can only offset the property's own payment; it is not added to her income.

9. Hard In this example, Offer A is 7.0% with no points and Offer B is 6.75% with 1 point on a $220,000 30-year loan. Find each payment, the monthly savings and the break-even.

Show answer

A $1,463.67, B $1,426.92, savings $36.75; points $2,200; break-even $2,200 ÷ $36.75 ≈ 60 months. Worth it only for a hold well beyond five years.

10. Hard A borrower has a mortgaged home and six mortgaged rentals and wants an eighth financed property. Under Fannie Mae's 2026 rules, is that allowed, and what changes?

Show answer

Yes; the count includes the home, so this is the eighth of a maximum ten. Because she will have seven to ten financed properties, other-property reserves rise to 6% of their balances, and the lender may impose stricter requirements.

11. Challenge In this example, a borrower earns $8,000 a month and has $2,400 of debts; a lender caps DTI at 45%. For a rental with market rent $2,400, what is the highest PITIA she could qualify for? What does that teach?

Show answer

Room for debt: $0.45 \times \$8{,}000 - \$2{,}400 = \$1{,}200$. Net rental income may be as low as $-\$1{,}200$: $\$1{,}800 - \text{PITIA} \geq -\$1{,}200$, so PITIA up to $3,000. She could qualify for a rental losing about $1,200 a month — qualifying is not the same as a good deal.

12. Challenge Suppose Elm Street's investor rate is 7.75% instead of 7%. What is the new P&I on $187,500, and what does the Rental worksheet show for monthly cash flow?

Show answer

P&I $1,343.27, about $95.83 more each month, and cash flow falls from $-\$65.77$ to about $-\$161.60$. Always run the deal at the rate you will actually be quoted.

COMMON MISTAKES

- Using an owner-occupied rate or down payment for a rental. Investment loans commonly need more down (as of 2026, at least 15% for one unit and 25% for two

to four with Fannie Mae) and carry higher rates.

- Forgetting reserves. Six months of PITIA plus other-property reserves must remain in your accounts after closing.
- Assuming 100% of the rent counts toward qualifying. Lenders commonly count 75% and subtract the full payment.
- Counting the property limit without your home. Fannie Mae's ten financed properties include the house you live in.
- Paying points on a loan you may refinance or sell within a few years. Compute the break-even first.
- Treating loan approval as proof that the deal works. The lender judges your ability to repay; you must judge whether the property pays.

Make it a game · Approve or Decline. One player is the underwriter; the others make up borrower cards: monthly income, debts, cash in the bank, months as a landlord, and a rental with price, rent and PITIA. The underwriter has two minutes per card to compute minimum down (25% for a duplex), net rental income at 75%, DTI and six months of reserves, then stamps APPROVE or DECLINE with a reason. The table checks the math. Score a point for every correct decision. Then vote on each approved card: should this borrower actually buy? A card that is approved but loses money teaches the lesson best.

Scripture. "The wicked borroweth, and payeth not again: but the righteous sheweth mercy, and giveth." (Psalm 37:21, KJV)

Lenders ask about income, reserves and debts because some borrowers do not repay. The righteous person in the psalm is marked by faithfulness with money — paying what he owes and having enough to give. Borrowing only what you can surely repay, with reserves to spare, is a way of keeping your word before you ever sign.

4.2 Owner-Occupant Loans on One to Four Units

OBJECTIVES

- Describe FHA, VA and conventional owner-occupant loans on one- to four-unit properties and state their 2026 down-payment and occupancy rules from official sources.
- Explain why lenders give owner-occupants better terms, and why misstating occupancy on a loan application is fraud and a federal crime.
- Apply FHA's self-sufficiency test to a three- or four-unit property and find the rent needed to pass.
- Explain how projected rent from the other units counts toward qualifying under FHA, VA and Fannie Mae rules, and the reserves each requires.
- Run a house-hack purchase in the Deal Analyzer's House hack worksheet and compare its cost with renting.

> **Warm-up.** Five minutes. Write the monthly rent of an apartment you might live in at age twenty-two. Now imagine owning a duplex: you live in one side and a tenant pays rent on the other. List three costs you would pay that a renter never pays, and one thing you would gain that a renter never gains.

WATCH

Fannie Mae's New 5% Down Multifamily Loan (Huge Opportunity)

Real Estate Rookie · 8:56

https://www.youtube.com/watch?v=vCy409kreyU

> **WHEN TO WATCH**
> Watch after the third core idea. Write down who qualifies, which properties are eligible and how rent from the other units is used. Then check each rule against this lesson's 2026 facts — loan rules change, and a video can fall out of date.

BACKUP VIDEO

How to Buy Multi-Family with FHA | Get Rental Income

Jeff Trevarthen · 7:01

https://www.youtube.com/watch?v=QyKGyYfXAkw

A loan officer's step-by-step overview of buying a two- to four-unit home with FHA. Watch after the project and compare each step with the 2026 HUD rules in this lesson; note anything he says that a lender might add on top of FHA's rules.

KEY TERMS

owner-occupant loan

A mortgage for a property the borrower will live in as a principal residence, usually with a lower down payment and rate than an investment loan.

principal residence

The home a borrower lives in for most of the year; a person may have only one at a time.

FHA loan

A mortgage insured by the Federal Housing Administration, part of HUD, allowing small down payments on one- to four-unit homes the borrower occupies.

VA loan

A mortgage guaranteed by the Department of Veterans Affairs for eligible veterans and service members, often with no down payment, for a home of up to four units they will live in.

mortgage insurance premium (MIP)

The upfront and annual insurance FHA charges borrowers to protect lenders against default.

private mortgage insurance (PMI)

Insurance on a conventional loan with less than 20% down, paid by the borrower and cancellable under the Homeowners Protection Act.

VA funding fee

A one-time fee many VA borrowers pay that helps lower the program's cost to taxpayers.

occupancy requirement

A loan condition that the borrower move into the property within a set time and live there, commonly for at least a year.

occupancy fraud

Falsely claiming on a loan application that you will live in a property in order to get owner-occupant terms.

self-sufficiency test

FHA's rule for three- and four-unit homes that the payment (PITI) may not exceed the property's net rental income from all units.

net self-sufficiency rental income

The appraiser's fair market rent for all units, including the owner's, minus the greater of the appraiser's vacancy and maintenance estimate or 25%.

CORE IDEAS

The story. Before 1934 most American home loans were short: three to five years, often interest-only, with a balloon payment at the end and a down payment of 30 to 50 percent. When the Depression came, borrowers could not refinance, and foreclosures swept the country. On June 27, 1934, President Franklin Roosevelt signed the National Housing Act, creating the **Federal Housing Administration**. The FHA did not lend money; it insured lenders against loss on long, fully amortizing loans with much smaller down payments. A decade later, on June 22, 1944, the Servicemen's Readjustment Act — the G.I. Bill — added a home-loan guaranty for returning veterans, with low-interest, no-down-payment loans. Together the two programs opened homeownership to millions of ordinary families. Both had one condition that still stands: the borrower must live in the home.

How they figured it out. Lenders have always noticed that people defend the roof over their own heads harder than any other debt. A family will cut every other expense before it lets its home go; an investor under pressure may walk away from a rental. So the government programs, and later Fannie Mae and Freddie Mac, saved their best terms — the smallest down payments and lowest rates — for **owner-occupants**, and wrote **occupancy requirements** into every loan. They also let those owner-occupants buy small multifamily buildings of up to four units, because a family living in one unit of a duplex or fourplex is still protecting its own home. That single rule created the strategy investors now call house hacking. It also created a temptation, and the law answers it plainly: knowingly lying on a mortgage application about occupancy, income or anything else is fraud and a federal crime.

The big idea. You may buy a one- to four-unit property with an owner-occupant loan if you will genuinely live in one unit. The terms below are from official sources as of 2026; check them again before you buy. **FHA** (HUD Handbook 4000.1): maximum LTV 96.5% — a 3.5% down payment — for borrowers with a credit score of 580 or higher, and 90% (10% down) for scores from 500 to 579; at least one borrower must move in within 60 days and intend to live there at least one year; borrowers pay an upfront and an annual **mortgage insurance premium**. **VA** (va.gov): no down payment if the price is not above the appraised value, no PMI or MIP, a possible **funding fee**, up to four units, and you must live in the home. **Conventional** (Fannie Mae's Eligibility Matrix): as little as 5% down on a two- to four-unit principal residence approved through its automated system, with **PMI** until you reach 20% equity.

How do the other units' rents count? Under FHA rules, if you have no history of rental income, the lender uses 75% of the lesser of the appraiser's fair market rent or the lease rent, and adds it to your income; your full payment still counts as a debt. Fannie Mae likewise counts 75% of gross rent from the appraiser's rent schedule and requires six months of reserves for a two- to four-unit principal residence. VA counts prospective rent from the other units only if you show landlord experience or a property manager and six months of reserves. For three- and four-unit FHA purchases there is an extra hurdle, the **self-sufficiency test**: the monthly PITI divided by the **net self-sufficiency rental income** may not exceed 100%. That income is the appraiser's fair market rent for *all* units, including yours, minus the greater of the appraiser's vacancy-and-maintenance estimate or 25%. FHA also requires three months of PITI reserves for three- and four-unit homes.

Mortgage insurance is the price of a small down payment. On a conventional loan, the Homeowners Protection Act of 1998 lets you ask the lender to cancel PMI when your balance reaches 80% of the home's original value and requires automatic termination at 78% on schedule. FHA's annual premium is not governed by that law and, with a small down payment, commonly lasts much longer — often for the life of the loan — so many owners later refinance out of FHA; ask the lender for the current rules. A low down payment also means little equity: if prices dip, an owner who must sell may owe more than the house brings. The House hack worksheet's **Mortgage insurance** input exists for exactly this reason. Get the lender's figure; never leave it at zero on a low-down-payment loan.

After the occupancy period, you may move out, keep the loan and rent your old unit; the loan does not convert to an investment loan. That is how many investors build their first few doors. But two lines must not be crossed. First, your intent at closing must be real: buying with no plan to live there is occupancy fraud. Second, each program limits repetition. FHA will generally insure only one principal-residence loan per borrower at a time, with narrow exceptions such as a job relocation of more than 100 miles or a growing family, and refuses any loan it determines was designed to acquire investment properties. VA entitlement and Fannie Mae's rules have their own limits. A family that grows out of its duplex, moves for work, or simply decides after a year to buy a house it will live in may legitimately repeat; a borrower who signs a new occupancy certificate every twelve months as a plan is gambling with a felony.

Run the numbers. Use the **House hack** worksheet. Its starting inputs are a realistic FHA duplex: a $300,000 price, 3.5% down, 6.5%, $150 a month of mortgage insurance and two units that would each rent for $1,350. Set **Down payment** to 3.5 (FHA), 5 (conventional two- to four-unit) or 0 (VA, if eligible); enter the lender's **Mortgage insurance**; and set **Market rent of the unit you live in** from rent comps, because that is what you would otherwise pay to rent. The tool shows your monthly cost to live there after the tenant's rent, repairs and CapEx saving, the principal you pay down, and the move-out view with management added. For a three- or four-unit FHA purchase, also run the self-sufficiency test by hand. The classic mistakes: leaving mortgage insurance at zero; counting 100% of the other units' rent; ignoring reserves; forgetting that you must actually live there; and judging the deal only by the live-in view when the move-out view loses money.

PICTURE STUDY



Colman family bungalow, Seattle, Unknown photographer, c. 1912 · Photograph · Museum of History and Industry (MOHAI), Seattle

Image: Wikimedia Commons, public domain

In 1906 James Colman and his son Laurence bought seventeen acres in the Fauntleroy neighborhood of West Seattle, then a quiet place of forest and shoreline. Laurence built this bungalow there, designed by the architect Daniel R. Huntington, and moved in with his wife and four children; the two girls on the fence are most likely Katharine and Isabel Colman. Bungalow Magazine featured the house in 1914. The picture opens this lesson because it shows what owner-occupant loans exist to protect: not a rental unit on a spreadsheet, but a family's home, lived in and cared for — the occupancy every one of those loans requires.

Look closely

- Look at the girls on the log fence. What does their presence tell you about how this property was used?
- Notice the deep porch and wide roof. Why were bungalows like this popular with families in the Pacific Northwest climate?
- Find the tall evergreens behind the house. What does the setting suggest about Seattle neighborhoods in 1912?
- Look at the young shrubs and stakes in the lawn. What do they tell you about how new the home was?

Talk about it

1. Why do lenders offer better terms to people who will live in the home than to investors who will not?
2. If someone signs a loan promising to live in a house but never intends to, whom does that harm?
3. Jeremiah told the exiles to build houses and dwell in them. How does honestly dwelling where you have promised to live honor both the lender and God?

PROJECT

The House-Hack Financing Sheet

You will find one real two- to four-unit listing near you and work out how it could be financed by someone who would live in it — FHA, conventional and (if a family member is a veteran, for discussion only) VA — using the 2026 rules in this lesson. You will run the House hack worksheet and, if the property has three or four units, the FHA self-sufficiency test. Use public listings and official websites only; contact no lender or agent except with a parent present and permission.

You will need

- One current duplex, triplex or fourplex listing
- Rent comps for each unit (or HUD Fair Market Rents as a rough check)
- HUD's Handbook 4000.1 page (in this unit's kits) and the VA's purchase-loan page at va.gov
- The School Launch Deal Analyzer (House hack worksheet) and your deal binder

Steps

1. Record the listing's price, units, unit sizes, taxes and an insurance estimate, and choose market rents for every unit, including the one you would live in.
2. Compute the minimum down payment under FHA (3.5%), conventional owner-occupant (5% for two to four units) and an investment loan (25%), as of 2026.
3. Run the House hack worksheet at 3.5% down with an example rate and an example mortgage-insurance figure, and record your monthly cost, the comparison with renting, principal paid and the move-out cash flow.
4. Run it again at 5% down and compare.
5. If the building has three or four units, apply FHA's self-sufficiency test by hand and state whether it passes and what rent would be needed.
6. List the reserves each loan type would require and add them to the cash needed.

7. Print the worksheets and write a verdict: would you live here, at what price, and with which loan? Include one sentence on what you would do after the first year. File it in your deal binder.

INVESTOR'S NOTEBOOK

1. Flashcards for owner-occupant loan, principal residence, FHA, VA, MIP, PMI, funding fee, occupancy requirement, occupancy fraud, self-sufficiency test and net self-sufficiency rental income.
2. Draw a three-column table — FHA, VA, conventional — with rows for minimum down, mortgage insurance, units allowed, occupancy rule, how rent counts and reserves, labeled "as of 2026."
3. Trap list: mortgage insurance left at zero; 100% of rent counted; reserves forgotten; occupancy treated as optional; judging only the live-in view.

KEY FORMULAS

$$\text{FHA minimum down (credit score} \geq 580) = 3.5\% \times \text{price} \quad (\text{max LTV } 96.5\%, \text{ as of 2026})$$

$$\text{Net self-sufficiency rental income} = \text{FMR}_{\text{all units}} - \max(\text{appraiser's vacancy and maintenance},\ 25\% \times \text{FMR})$$

$$\text{Self-sufficiency ratio} = \frac{\text{PITI}}{\text{net self-sufficiency rental income}} \leq 100\%$$

$$\text{Rent counted for qualifying (no history)} = 75\% \times \min(\text{appraiser's FMR},\ \text{lease rent})$$

$$\text{Housing cost} = \text{P\&I} + \text{MI} + \tfrac{\text{taxes+insurance}}{12} + \text{HOA} + \text{utilities} + \text{other} + \text{all rents}(\text{repairs \%} + \text{CapEx \%}) - \text{other rents}(1 - \text{vacancy \%})$$

From history. The G.I. Bill's first home-loan benefit was modest: in 1944 the VA guaranteed 50 percent of a veteran's loan, up to a maximum of $2,000, and the loan had to be repaid within twenty years. Housing prices rose so fast after the war that Congress doubled the guaranty to $4,000 and stretched the term to twenty-five years in 1945. The program has since been changed many times, and VA has guaranteed tens of millions of home loans.

Example 1. In this example — the House hack worksheet's starting numbers — a duplex costs $300,000 with $7,500 closing costs, 3.5% down at 6.5% for 30 years and $150 a month of mortgage insurance. Each unit rents for $1,350; taxes $3,000, insurance $1,400, owner-paid utilities $120 a month, repairs 6%, CapEx 7%, vacancy 6%. Find the cash needed and your monthly cost to live there.

Show solution

1. Cash: $\$10{,}500 + \$7{,}500 = \$18{,}000$; loan $289,500; P&I $1,829.84
2. Fixed costs: $(\$3{,}000 + \$1{,}400) \div 12 + \$120 = \$486.67$; repair and CapEx saving $\$2{,}700 \times 13\% = \$351$
3. Tenant's rent after vacancy: $\$1{,}350 \times 0.94 = \$1{,}269$
4. Housing cost: $\$1{,}829.84 + \$150 + \$486.67 + \$351 - \$1{,}269 = \$1{,}548.51$ (the tool shows $1,548.50)
5. Compared with renting your unit for $1,350: about $198.50 more a month, but about $269.65 a month of first-year payments is principal you keep

Answer: With $18,000 down you would pay about $1,548.50 a month to live there — more than renting until principal is counted (net about $1,278.85). The move-out view loses about $508 a month, so this is a home with a helper, not yet a rental.

Example 2. In this example, an FHA buyer wants a $600,000 fourplex with 3.5% down at 6.5% for 30 years; taxes are $500 and insurance $250 a month. The appraiser's fair market rent is $1,300 per unit and estimates vacancy and maintenance at 20%. Apply the self-sufficiency test.

Show solution

1. Loan $579,000 (before any financed upfront premium); P&I $3,659.67; PITI $\$3{,}659.67 + \$500 + \$250 = \$4{,}409.67$
2. FMR all four units: $4 \times \$1{,}300 = \$5{,}200$; subtract the greater of 20% or 25%: $25\% \times \$5{,}200 = \$1{,}300$
3. Net self-sufficiency rental income: $\$5{,}200 - \$1{,}300 = \$3{,}900$
4. Ratio: $\$4{,}409.67 \div \$3{,}900 \approx 113\%$ — above 100%, so it fails
5. Rent needed to pass: $\$4{,}409.67 \div 0.75 \approx \$5{,}879.57$, about $1,470 per unit

Answer: The fourplex fails FHA's self-sufficiency test as of 2026. It would pass only at about $1,470 per unit in fair market rent, at a lower price, or with a lower rate.

Example 3. In this example, compare the minimum down payment on a $400,000 duplex bought four ways under the 2026 rules: as an investment (conventional), with FHA, with a conventional owner-occupant loan, and with a VA loan for an eligible veteran.

Show solution

1. Investment (75% LTV): $\$400{,}000 \times 25\% = \$100{,}000$
2. FHA (96.5% LTV, score ≥ 580): $\$400{,}000 \times 3.5\% = \$14{,}000$
3. Conventional owner-occupant (95% LTV): $\$400{,}000 \times 5\% = \$20{,}000$
4. VA (price not above appraisal): $0 down; a funding fee may apply
5. Add closing costs and reserves to each; Fannie Mae requires six months' reserves on a two- to four-unit principal residence

Answer: Living there cuts the minimum down payment from $100,000 to $20,000, $14,000 or even $0 — the single biggest financing advantage a young investor has, and the reason honesty about occupancy matters so much.

PRACTICE

1. Easy As of 2026, what is the minimum FHA down payment on a $350,000 duplex for a borrower with a 620 credit score, and what is the base loan amount?

   Show answer

   $3.5\% \times \$350{,}000 = \$12{,}250$; base loan $337,750 before any financed upfront premium.

2. Easy The same borrower's credit score is 550. What is the FHA minimum down payment?

   Show answer

   Scores from 500 to 579 are limited to 90% LTV: $10\% \times \$350{,}000 = \$35{,}000$.

3. Easy According to the VA, what down payment does an eligible veteran need on a home whose price does not exceed its appraised value?

   Show answer

   None. VA-backed purchase loans can require no down payment in that case, though a funding fee may apply and the veteran must live in the home.

4. Medium In this example, an FHA buyer wants a $500,000 fourplex: loan $482,500 at 6.5% (P&I $3,049.73), taxes $400 and insurance $200 a month. Fair market rent is $1,100 per unit. Does it pass the self-sufficiency test?

   Show answer

   PITI $3,649.73; net income $4 \times \$1{,}100 \times 0.75 = \$3{,}300$; ratio $\$3{,}649.73 \div \$3{,}300 \approx 110.6\%$. It fails.

5. Medium For the fourplex in problem 4, what fair market rent per unit would pass the test?

   Show answer

   $\$3{,}649.73 \div 0.75 = \$4{,}866.31$ total, about $1,216.58 per unit.

6. Medium In this example, a buyer puts 5% down on a $400,000 duplex with a conventional loan. Under the Homeowners Protection Act, at what loan balance can she ask to cancel PMI, and when must it end automatically?

   Show answer

   She may request cancellation at 80% of the original value, $320,000; it terminates automatically at 78%, $312,000, on the scheduled amortization.

7. Medium In this example, PITIA on a triplex principal residence is $3,000. What reserves would Fannie Mae require as of 2026, and what would FHA require?

Show answer

Fannie Mae: six months, $18,000. FHA: three months of PITI for three- and four-unit homes, about $9,000 (using the same figure).

8. Hard Run the House hack worksheet's starting duplex at 5% down with $120 a month of mortgage insurance. The tool shows a housing cost of about $1,490.06 and cash needed of $22,500. Compare with 3.5% down.

Show answer

At 3.5% down: $1,548.50 a month and $18,000 cash. Putting $4,500 more down lowers the monthly cost by about $58, mostly through lower mortgage insurance and a smaller loan.

9. Hard A buyer applies for an FHA loan on a duplex, certifying that he will live there, but he already plans to rent both units and live with his parents. What is wrong, and what could happen?

Show answer

That is occupancy fraud: a knowingly false statement on a mortgage application, which is a federal crime. He could face the loan being called due, civil penalties and criminal prosecution — and he has lied to a neighbor-lender.

10. Hard A borrower with an FHA loan on her duplex takes a new job 30 miles away and wants a second FHA loan on a house near work. Under HUD's 2026 handbook, does the relocation exception apply?

Show answer

No. The relocation exception requires an employment-related move to a new principal residence more than 100 miles away. She could keep the duplex as a rental and use a different loan type for the new home.

11. **Challenge** A veteran buying a fourplex wants the lender to count the other units' projected rent. Under VA rules (as of 2026), what must he usually show, and how much is six months of reserves if PITI is $3,200?

    Show answer

    Landlord experience or a property manager, plus cash reserves of at least six months of PITI: $6 \times \$3{,}200 = \$19{,}200$. Without the rent, he must qualify on his own income.

12. **Challenge** In this example, an FHA appraiser estimates fair market rent for the other unit of a duplex at $1,400, and the signed lease is for $1,350. The buyer has no rental history. How much rental income can the lender count?

    Show answer

    $75\% \times \min(\$1{,}400,\ \$1{,}350) = 0.75 \times \$1{,}350 = \$1{,}012.50$ a month, added to income; the full payment still counts as debt.

COMMON MISTAKES

- Treating occupancy as a formality. Owner-occupant loans require you to move in and live there, commonly at least a year; a false certification is fraud.
- Leaving mortgage insurance out of the analysis. FHA loans carry upfront and annual premiums and low-down conventional loans carry PMI; get the lender's figures.
- Counting all of the other units' rent toward qualifying. FHA, VA and Fannie Mae commonly count 75%, with conditions.
- Forgetting FHA's self-sufficiency test on three- and four-unit homes. PITI ÷ (fair market rent of all units minus at least 25%) must not exceed 100%.
- Assuming you can repeat an FHA house hack every year. FHA generally insures one principal residence per borrower, with narrow exceptions.
- Judging a house hack only by the live-in cost. Check the move-out view; a property that loses money once you leave is a home, not yet an investment.

Make it a game · Live There or Not?. Write ten short scenario cards: “Buys a duplex with FHA, moves in, rents the other side,” “Buys a triplex, never moves in, tells the lender she will,” “Moves out after two years for a job and rents both units,” “Veteran buys a fourplex with a VA loan and lives in one unit,” and so on. Players take turns reading a card and calling HONEST or FRAUD, then naming the rule that applies (occupancy, one-FHA-loan limit, self-sufficiency, reserves). A correct call and rule scores two points; a correct call alone, one. Finish by computing the minimum down payment on a $400,000 duplex for FHA, conventional and investment loans.

Scripture. “Build ye houses, and dwell in them; and plant gardens, and eat the fruit of them;” (Jeremiah 29:5, KJV)

God told the exiles in Babylon to settle down, build houses and dwell in them — to make real homes. Owner-occupant loans reward exactly that: actually dwelling in the house you buy. A house hack is honest when the family truly lives there and cares for the place, and dishonest when “dwelling” is only a word on a form.

4.3 DSCR Loans, Portfolio Lenders and Local Banks

OBJECTIVES

- Explain how DSCR loans, portfolio loans and commercial loans differ from conventional loans in what they underwrite, what they cost and what risks they carry.
- Compute a property's DSCR both as NOI ÷ debt service and as many DSCR lenders commonly compute it (rent ÷ PITIA), and explain why the two can disagree.
- Compute the maximum loan a lender will make from a required DSCR and from a maximum LTV, and identify which limit binds.
- Compute a balloon balance and explain refinance risk, prepayment penalties, and recourse versus non-recourse debt.
- Prepare to meet a local bank or credit union as a relationship borrower, with the documents and track record lenders ask for.

> **Warm-up.** Five minutes. Write the names of three businesses in your town where the owner or staff know your family by name. Would any of them let you pay next week if you forgot your wallet? Why? Write one sentence on what that trust is worth — and how it is earned.

WATCH

DSCR Loans: The Greatest Investor Loan of All Time?

BiggerPockets · 16:29

https://www.youtube.com/watch?v=6korxs8cK-E

> **WHEN TO WATCH**
> Watch after the fourth core idea. Note each term and penalty the two lenders describe (3:12–7:30) and their warnings (from 7:55). Treat every rate and fee as an example from the date of the video, not a current quote.

BACKUP VIDEO

How to Finance Rental Properties: Local Banks, Portfolio Lenders, Hard Money, Etc.

InvestFourMore Real Estate · 20:44

https://www.youtube.com/watch?v=4bGz2ObhCzk

A longtime investor explains how he financed rentals with local banks and portfolio lenders after conventional limits. Watch the first ten minutes after the sixth core idea, and list the questions he asks a bank before borrowing.

KEY TERMS

DSCR loan

A non-QM investment-property loan underwritten mainly on the property's rent compared with its payment rather than on the borrower's personal income.

non-QM loan

A mortgage that does not meet the federal "qualified mortgage" standards, often priced higher and underwritten by different rules.

portfolio loan

A loan the lender keeps on its own books instead of selling, so the lender can set its own rules.

commercial loan

A loan on income property, such as apartments of five or more units, underwritten mainly on NOI, DSCR and LTV.

amortization period

The number of years over which loan payments are calculated to pay off the principal.

balloon payment

A large final payment of the remaining principal due when a loan's term is shorter than its amortization period.

prepayment penalty

A fee for paying off a loan early, often stepping down over several years (for example, 3-2-1 or 5-4-3-2-1 percent).

recourse loan

A loan on which the borrower is personally liable beyond the property, so the lender can pursue other assets after a default.

non-recourse loan

A loan on which, apart from listed exceptions, the lender can look only to the property for repayment.

personal guarantee

A borrower's signed promise to repay a loan made to his company or LLC if the company cannot.

relationship banking

Borrowing from a lender, often a local bank or credit union, that knows the borrower's history, deposits and character.

blanket loan

A single loan secured by several properties.

CORE IDEAS

The story. On October 17, 1904, a young San Francisco produce merchant named Amadeo Pietro Giannini opened the Bank of Italy in a converted saloon, determined to serve the "little fellow" — the fishermen, laborers and small shopkeepers whom the big banks ignored. Eighteen months later, on April 18, 1906, the great earthquake struck and fire swept the city. Before the flames reached his bank, Giannini loaded its gold and cash into a garbage wagon, covered it with trash, and hauled it to his home in San Mateo. While other banks' vaults sat too hot to open for weeks, he set a plank across two barrels in the street and went back to business, lending to people who wanted to rebuild — often, the story goes, on a handshake and his judgment of their character. He later said every one of those loans was repaid. Giannini knew his borrowers, and they knew him.

How they figured it out. Giannini's plank-and-barrel bank was **relationship banking** in its plainest form: a lender who keeps the loan himself, knows the borrower and judges both the person and the project. Local banks and credit unions still lend this way. A **portfolio loan** stays on the lender's own books instead of being sold to Fannie Mae or Freddie Mac, so the lender can write its own rules — lending to an LLC, on a property needing repairs, on several houses at once with a **blanket loan**, or on a small apartment building. For larger income properties, lenders learned to underwrite the property more than the person: will its net operating income cover the payments with room to spare? That habit gave us the **debt service coverage ratio** as a lending rule. In the last two decades a further market grew for **DSCR loans**: investment-property loans, outside the federal "qualified mortgage" rules, that qualify the deal mainly on its rent rather than the borrower's paycheck.

The big idea. A **DSCR loan** asks one main question: does the property's rent cover its payment? Many DSCR lenders commonly compute the ratio as monthly market rent divided by **PITIA** — not NOI divided by debt service as you learned in Lesson 3.3 — and minimums commonly range from about 1.0 to 1.25 (examples; every lender differs). In exchange for not verifying your personal income the way a conventional lender would, DSCR loans commonly carry higher rates and fees than conventional investment loans, maximum LTVs around 75–80% on purchases, and **prepayment penalties** that step down over three to five years (all examples, as of 2026; get real quotes). They are often made to LLCs, usually with a **personal guarantee**. They help investors who have reached Fannie Mae's financed-property limit or whose tax returns show little income. They do not make a weak deal stronger.

Here is the danger the lender's shortcut hides. In this example, the Elm Street house rents for $2,100 and its PITIA is $1,247.44 + $233.33 + $108.33 = $1,589.11. A lender using rent ÷ PITIA sees $2,100 ÷ $1,589.11 = 1.32 and may approve the loan. But you computed the house's true coverage in Lesson 3.3: NOI ÷ debt service is only 0.95, because vacancy, repairs, CapEx and management consume rent the lender's ratio ignores. The loan can be approved on a house that loses about $66 a month. A lender's approval measures the lender's risk on the lender's terms. Your own NOI-based DSCR, cash flow and stress test measure yours. Use the Deal Analyzer's DSCR card, which always computes NOI ÷ debt service, as the honest number.

Commercial loans finance properties of five or more units and are underwritten mainly on NOI, DSCR and LTV; the lender lends the *lesser* of the two limits. Their

structure differs from a 30-year home loan. Many are written with a term of five, seven or ten years but payments figured on a 20- to 30-year **amortization period**, leaving a **balloon payment** of most of the principal when the term ends. If rates have risen or NOI has fallen, refinancing that balloon may require fresh cash — or may be impossible. Read every term sheet for prepayment penalties, rate adjustments, reserves the lender holds, and whether the loan is **recourse** (you are personally liable beyond the property) or **non-recourse** (the lender looks only to the property, apart from listed "bad-boy" exceptions such as fraud). Small investors' loans from local banks are usually recourse, often with a personal guarantee.

How does a beginner find a good local lender? Start the relationship before you need it. Open accounts where you would like to borrow, keep your personal finances orderly, and when you are an adult investor, ask a commercial loan officer — with an experienced adult beside you at first — what the bank lends on, what it requires and what its typical terms are. Bring what lenders ask for: a personal financial statement, two years of tax returns, a schedule of real estate owned with rents and loan balances, rent rolls and leases, and a written plan for the property with your own deal worksheet. Credit unions and community banks often lend in their own area, may finance repairs, and value deposits and a track record. Relationship banking cuts both ways: a lender who knows you will forgive less if you hide problems. Tell the truth early when a deal goes wrong; reputation is the collateral that never appears on the closing statement.

Run the numbers. The Rental worksheet's **DSCR** card always computes NOI ÷ debt service; compare it with the lender's rent ÷ PITIA figure and trust the lower. To model a DSCR or portfolio loan, raise **Interest rate** to the example quote, add points and fees to **Buyer closing costs**, and set **Down payment** to the lender's required percent (often 20–25%). The tool does not model balloons, so read the **Loan balance** column of its projection at year 5 or 10 to see roughly what you would owe when a balloon comes due, and test whether NOI at that time could refinance it. To find the largest loan a lender will make, divide NOI by the required DSCR, divide by 12, and divide by the payment per dollar borrowed — then compare with the LTV limit. The classic mistakes: trusting a lender's rent ÷ PITIA ratio as proof of cash flow; ignoring prepayment penalties; taking a balloon without a refinance plan; and signing a personal guarantee without understanding it.

PICTURE STUDY



Men inside Dexter Horton Bank, Seattle, Theodore E. Peiser, 1882 · Photograph · Museum of History and Industry (MOHAI), Seattle

Image: Wikimedia Commons, public domain

Dexter Horton (1825–1904) came to Seattle as a pioneer and in 1870 opened the first business in the town devoted to banking. Photographer Theodore Peiser captured its interior in 1882: the curved counter, the cashiers and partners — among them the city founder Arthur Denny — and the big vault, installed about that time, whose claim to be fireproof was proved true when the Great Seattle Fire gutted the building in 1889. It opens this lesson because a small frontier bank was relationship banking at its simplest: everyone in this room knew the borrowers, and the borrowers knew them.

Look closely

- Count the men. Who do you think lends the money, and who is the customer?
- Find the vault behind the counter. Why would a bank in a wooden frontier town spend so much on it?
- Read what you can of the sign on the wall. What does posting the bank's hours say about the kind of business it wanted to be?
- Compare this room with a modern bank or a loan application online. What would a borrower gain and lose in each?

Talk about it

1. Why might a banker who knew you personally lend on terms a distant lender would refuse?
2. How could a long relationship with a lender become a temptation to hide a problem — and why is telling the truth early wiser?
3. Proverbs says a neighbor near is better than a brother far off. How does that wisdom apply to choosing and keeping a lender?

PROJECT

Three Ways to Borrow

Take one property from your deal binder and imagine financing it three ways: a conventional investment loan (Lesson 4.1), a DSCR loan and a portfolio loan from a local bank. You will build an example term sheet for each from published information (lender websites, credit-union rate pages and the video), labeled as examples, and run each in the Rental worksheet. Contact no lender except with a parent present and permission; never share personal information.

You will need

- One property from your deal binder with its Rental worksheet
- Published example terms for a DSCR loan and a local bank or credit-union investment loan (rate, points, LTV, term, amortization, prepayment penalty)
- A calculator and spreadsheet
- The School Launch Deal Analyzer and your deal binder

Steps

1. Write three example term sheets side by side: rate, points, down payment or LTV, term, amortization, balloon, prepayment penalty, recourse or guarantee.
2. For each, compute the maximum loan from the lender's DSCR or DTI rule and from its LTV, and note which binds.
3. Run each loan in the Rental worksheet (rate, down payment, closing costs including points), and record cash needed, monthly cash flow, cash-on-cash and the NOI-based DSCR.
4. Compute the DSCR-loan ratio the lender's way (rent ÷ PITIA) and compare it with the tool's NOI-based DSCR.
5. For the bank loan with a balloon, read the projected loan balance at the balloon year and write whether you could refinance it if rates were 1.5 points higher.

6. List the documents you would bring to a first meeting with a local lender.
7. Print the three worksheets and write a verdict: which loan, if any, fits this property and why — including the risks you would accept and refuse. File it in your deal binder.

INVESTOR'S NOTEBOOK

1. Flashcards for DSCR loan, non-QM, portfolio loan, commercial loan, amortization period, balloon payment, prepayment penalty, recourse, non-recourse, personal guarantee, relationship banking and blanket loan.
2. Draw two bars for the Elm Street house: the lender's rent ÷ PITIA (1.32) and the true NOI ÷ debt service (0.95), with a line at 1.00 and the gap labeled with the expenses the lender ignored.
3. Trap list: lender's DSCR mistaken for cash flow; prepayment penalty ignored; balloon without a refinance plan; personal guarantee signed unread; higher rate not run through the worksheet.

KEY FORMULAS

$$\text{DSCR (property)} = \frac{\text{NOI}}{\text{annual debt service}} \qquad \text{DSCR (many DSCR lenders)} = \frac{\text{monthly rent}}{\text{PITIA}}$$

$$\text{Max annual debt service} = \frac{\text{NOI}}{\text{required DSCR}}$$

$$\text{Max loan (DSCR)} = \frac{\text{max monthly payment}}{\text{payment per dollar}} \qquad \text{Max loan (LTV)} = \text{value} \times \text{max LTV}$$

$$\text{Loan offered} = \min(\text{max loan by DSCR},\ \text{max loan by LTV})$$

$$\text{Balloon due} = \text{balance after } k \text{ payments} = L(1+r)^k - P \cdot \frac{(1+r)^k - 1}{r}$$

From history. Giannini kept lending to people and projects other bankers doubted. During the Great Depression he bought the bonds that financed construction of the Golden Gate Bridge, and he lent Walt Disney the money to finish *Snow White*, the first full-length animated feature film made in the United States. His bank grew by opening branches across California, and it eventually became Bank of America.

Example 1. In this example, a small apartment building has NOI of $30,000 and appraises at $400,000. A local bank requires DSCR 1.25 and LTV no higher than 75%, at 7.5% amortized over 30 years. What is the largest loan, and how much must the buyer bring at a $400,000 price (before closing costs)?

Show solution

1. Max debt service: $\$30{,}000 \div 1.25 = \$24{,}000$ a year, $2,000 a month
2. Payment per dollar at 7.5%, 360 months: 0.0069921; loan $\$2{,}000 \div 0.0069921 \approx \$286{,}035$
3. LTV limit: $75\% \times \$400{,}000 = \$300{,}000$
4. Loan offered: $\min(\$286{,}035,\ \$300{,}000) = \$286{,}035$; buyer brings $\$400{,}000 - \$286{,}035 = \$113{,}965$

Answer: The DSCR limit binds: about $286,000, so the buyer needs about $114,000 (28.5%) plus closing costs and reserves — more than the 25% the LTV alone suggests.

Example 2. In this example, compute the Elm Street house's DSCR the way many DSCR lenders do (rent ÷ PITIA) and the way the Deal Analyzer does (NOI ÷ debt service). Rent $2,100; P&I $1,247.44; taxes $2,800 and insurance $1,300 a year; NOI $14,180.08.

Show solution

1. PITIA: $\$1{,}247.44 + \$2{,}800 \div 12 + \$1{,}300 \div 12 = \$1{,}247.44 + \$233.33 + \$108.33 = \$1{,}589.11$
2. Lender-style: $\$2{,}100 \div \$1{,}589.11 \approx 1.32$
3. Property: $\$14{,}180.08 \div \$14{,}969.31 \approx 0.95$
4. Difference: the lender's ratio ignores vacancy ($1,512), repairs, CapEx and management ($5,407.92 together) — $6,919.92 a year

Answer: A lender might approve at 1.32 while the house's true coverage is 0.95 and it loses about $66 a month. Trust the NOI-based DSCR.

Example 3. In this example, a five-unit building has NOI of $63,600 and a $600,000 commercial loan at 7%, amortized over 25 years with a 5-year balloon. Find the payment, the starting DSCR, the balloon due, and the DSCR if the balance must be refinanced at 8.5% over 25 years with NOI unchanged.

Show solution

1. Payment: $4,240.68 a month, $50,888.10 a year; DSCR $63,600 ÷ $50,888.10 ≈ 1.25
2. Balance after 60 payments (the balloon): ≈ $546,972.91
3. New payment at 8.5%, 25 years: $4,404.37 a month, $52,852.49 a year; DSCR ≈ 1.20
4. At 1.25, a lender would lend only $63,600 ÷ 1.25 ÷ 12 ÷ 0.0080523 ≈ $526,560; shortfall ≈ $20,413

Answer: The owner owes about $547,000 in year 5 and, if rates rise to 8.5% with flat NOI, must bring about $20,400 to refinance. Balloons turn rate changes into cash calls.

PRACTICE

1. Easy In this example, a property's NOI is $24,000 and its annual debt service is $20,000. What is its DSCR?

   Show answer

   $24,000 ÷ $20,000 = 1.20.

2. Easy A DSCR lender computes rent ÷ PITIA. In this example, rent is $2,400 and PITIA is $1,900. What ratio does the lender see?

   Show answer

   $2,400 ÷ $1,900 ≈ 1.26 — before any vacancy, repairs, CapEx or management.

3. Easy In one sentence each, define a recourse loan and a non-recourse loan.

   Show answer

   On a recourse loan the borrower is personally liable for any shortfall after the property is sold; on a non-recourse loan the lender can generally look only to the property, except for listed bad acts such as fraud.

4. Medium In this example, a lender requires DSCR 1.20 and the NOI is $36,000. What is the maximum annual and monthly debt service?

Show answer

$36,000 ÷ 1.20 = $30,000 a year, $2,500 a month.

5. Medium In this example, the DSCR rule supports a $380,000 loan, but the lender's maximum LTV is 75% and the appraisal is $500,000. How much will the lender lend?

Show answer

The lesser of $380,000 and 75% × $500,000 = $375,000: $375,000.

6. Medium In this example, a DSCR loan of $250,000 has a 5-4-3-2-1 prepayment penalty. What would it cost to pay it off in year 3?

Show answer

3% × $250,000 = $7,500. Penalties matter if you might sell or refinance early.

7. Medium In this example, a bank loan of $400,000 at 7.5% is amortized over 25 years with a 7-year balloon. Find the monthly payment and the balloon due.

Show answer

Payment $2,955.96; balance after 84 payments ≈ $349,829 due in year 7 — most of the original loan.

8. Hard In this example, a DSCR loan on $240,000 is offered at 8.0% with 2 points; a conventional investment loan at 7.25% with 0.5 point. Compare the yearly payments and the upfront points.

Show answer

Payments $1,761.03 versus $1,637.22 a month, $1,485.74 a year more for the DSCR loan; points $4,800 versus $1,200, $3,600 more upfront. Convenience has a price.

9. Hard The Elm Street house shows 1.32 on a lender's rent ÷ PITIA test but 0.95 as NOI ÷ debt service. Explain to a friend why a loan approval does not mean the house will cash-flow.

Show answer

The lender's ratio ignores vacancy, repairs, CapEx and management, about $6,920 a year here. After those costs the income does not cover the payment, so the owner would lose about $66 a month even though the loan was approved.

10. Hard List five documents a local bank commonly asks a small investor to bring, and say why relationship lenders value honesty about problems.

Show answer

Personal financial statement, two years of tax returns, schedule of real estate owned, rent rolls and leases, and a property plan with the deal worksheet. A lender who knows you will often work with a problem disclosed early but will not trust a borrower who hides one.

11. Challenge In this example, NOI is $30,000 and the lender requires DSCR 1.25 on a 30-year amortization. Find the maximum loan at 6.5% and at 8%.

Show answer

Max payment $2,000 a month. At 6.5%: ≈ $316,422; at 8%: ≈ $272,567. A 1.5-point rate rise cuts the loan by about $43,855, which the buyer must replace with cash.

12. Challenge In this example, a five-unit building has NOI of $45,000; similar buildings sell at a 7% cap rate. A bank lends up to 75% LTV and requires DSCR 1.25 at 7% amortized over 25 years. Find the value, both loan limits and the loan offered.

Show answer

Value $45,000 ÷ 0.07 ≈ $642,857; LTV limit ≈ $482,143; DSCR limit: $36,000 a year, $3,000 a month, loan ≈ $424,461. The bank lends about $424,461; the buyer needs about $218,000 (34%) plus costs.

COMMON MISTAKES

- Treating a DSCR lender's rent ÷ PITIA ratio as proof of cash flow. Compute NOI ÷ debt service yourself.

- Forgetting that the lender lends the lesser of the DSCR limit and the LTV limit. The binding limit sets your down payment.
- Ignoring prepayment penalties. A step-down penalty can cost thousands if you sell or refinance early.
- Taking a balloon loan without a refinance plan. Test whether NOI could carry the balance at a higher rate when the balloon comes due.
- Assuming an LLC loan protects you personally. Small investors' loans are commonly recourse or personally guaranteed.
- Running the deal at a conventional rate when the actual loan is a higher-priced DSCR or portfolio loan.

Make it a game · Which Limit Binds?. Make cards with an income property's NOI and appraised value, and a lender card with a required DSCR, maximum LTV and rate (use 7% for 30 years: $6.65 per $1,000 a month). Each round, every player computes the loan by DSCR (NOI ÷ DSCR ÷ 12 ÷ 0.00665) and by LTV, circles the lesser, and writes the buyer's down payment. First correct answer scores a point; naming which limit bound scores another. Bonus round: compute the same property's DSCR as rent ÷ PITIA and as NOI ÷ debt service and argue which one the buyer should trust.

Scripture. "Thine own friend, and thy father's friend, forsake not; neither go into thy brother's house in the day of thy calamity: for better is a neighbour that is near than a brother far off." (Proverbs 27:10, KJV)

Solomon prized near neighbors and long friendships, the kind that hold in a day of trouble. A local lender who knows you is that kind of neighbor in business; the relationship is built over years and kept by honesty. Forsaking it for a slightly better rate from a stranger far off may cost more than it saves when hard days come.

4.4 Seller Financing, Private Money and Hard Money

OBJECTIVES

- Explain how seller financing works with a promissory note and a recorded mortgage or deed of trust, and compute its payment and balloon.
- Compare a note-and-mortgage sale with an installment land contract and name the risks of each to buyer and seller.
- Set out the written terms and recorded security every private-money loan needs, and explain why pooled investments may be securities.
- Compute the true cost of a hard-money loan — interest, points and fees — for a planned and a delayed project, using the Deal Analyzer's convention.
- Explain the due-on-sale clause and why "subject-to" purchases carry serious legal and trust risks that make them unsuitable for beginners.

> **Warm-up.** Five minutes. Your neighbor offers to sell you his old riding mower for $1,200: $200 now and $100 a month. Write down three things you would want in writing before agreeing — and one thing that could go wrong for him and one for you. Every seller-financing deal is this conversation, with a house.

WATCH

Seller Financing in Real Estate Investing – How it Works

Coach Carson · 11:25

https://www.youtube.com/watch?v=_vgsEXS0w5A

> **WHEN TO WATCH**
> Watch after the third core idea. Copy Coach Carson's two diagrams — a bank closing and a seller carry-back closing — and label who receives the deed, who signs the promissory note and who records the mortgage or deed of trust.

BACKUP VIDEO

Hard Money Loans vs. Soft Money Loans | When to Use Each

BiggerPockets · 18:09

https://www.youtube.com/watch?v=whhbd6GTO3s

Two investors explain hard money and "soft" private money, with typical rates, points and questions to ask. Watch 0:34–11:04 after the fifth core idea and treat every rate as an example from the date of the video.

KEY TERMS

seller financing

An arrangement in which the seller lends part of the price to the buyer, who repays the seller over time; also called owner financing or a seller carry-back.

promissory note

The borrower's signed written promise to repay a loan on stated terms.

deed of trust (or mortgage)

The recorded document that pledges the property as security for the note and lets the lender foreclose after a default.

installment land contract

A sale in which the seller keeps legal title until the buyer finishes paying; also called a contract for deed or land contract.

due-on-sale clause

A loan provision letting the lender demand full payment if the property is sold or transferred.

hard money

A short-term, asset-based loan from a private lender, commonly for purchase and rehab, with high rates and upfront points.

interest-only loan

A loan whose payments cover only interest, so the full principal is due at the end.

subject-to

A purchase in which the buyer takes title while the seller's existing loan stays in place in the seller's name.

private money

A loan from an individual, such as a relative or friend, rather than an institution.

points (lender)

Upfront fees charged as a percentage of the loan amount; one point is 1%.

draw schedule

A plan for releasing rehab-loan money in stages as work is completed and inspected.

security (investment)

An investment in which people put money into a common enterprise expecting profit from others' efforts, regulated by securities laws.

CORE IDEAS

The story. In the 1790s a group of Dutch investors bought rights to more than three million acres of western New York, known ever after as the Holland Purchase. From a land office opened at Batavia in 1801, the Holland Land Company's agents sold farms to settlers. The plan called for land at about $2.75 an acre with a quarter to a third paid down, but most arriving families could not afford that, so the agents improvised: smaller down payments, longer terms, even payment partly in labor. The company had become a lender. Its leniency won goodwill for years, but debts piled up, and evicting families who had cleared and settled the land proved hard. In the 1830s, after New York taxed debts owed to foreign landowners, the company sold its contracts to local investors who enforced collections and evictions far more strictly. In 1836 angry crowds attacked the land offices at Mayville and Batavia. By 1839 the company's last land in western New York was sold.

How they figured it out. The Holland Purchase showed both the promise and the danger of selling on credit. A seller who finances a sale becomes a lender, with all a lender's duties: clear written terms, an honest judgment of whether the buyer can pay, a lawful remedy if he does not, and fair dealing when hard times come. Over the next two centuries American law sorted those duties into documents. In the common modern form, the buyer receives the deed at closing and signs a **promissory note** and a **mortgage** or **deed of trust**, which is recorded, so the seller holds a lien and must follow the state's foreclosure process after a default. In an **installment land contract**, the seller keeps title until the last payment — much like the contracts many frontier buyers signed — and buyers who fell behind could lose everything they had paid. Many states now regulate land contracts closely. Federal and state lending laws can also apply when a seller finances a home for a buyer who will live in it, so both sides use an attorney.

The big idea. In **seller financing**, the seller "carries back" part of the price as a loan. Everything is negotiable: price, down payment, rate, amortization, and usually a **balloon** when the remaining balance comes due. In this example, a $200,000 house sells with 10% down; the seller carries $180,000 at 6%, amortized over 30 years with a 7-year balloon. The payment is $1,079.19 a month, and after 84 payments about $161,350.89 is due — so the buyer must refinance or sell by then. Sellers accept such deals for steady interest income or to sell a property banks will not finance; buyers gain flexibility and lower closing costs. The great hidden risk is the seller's own mortgage. Most mortgages contain a **due-on-sale clause**, made generally enforceable nationwide by the Garn–St Germain Act of 1982, so a sale can allow the seller's lender to demand payment in full. Seller financing is cleanest when the seller owns the property free and clear.

Private money is a loan from a person rather than an institution — often a parent, grandparent or friend. It must never be informal. Put it in a signed promissory note stating the amount, rate, payment schedule, maturity date and what happens on default; secure it with a recorded deed of trust or mortgage; obtain a title report; and name the lender on the property's insurance. Both sides should understand they could lose money, and the relationship is worth more than any deal. In this example, a grandparent lends $50,000 at 8% interest-only for three years: $4,000 a year, or $333.33 a month, with the whole $50,000 due at the end. And beware scale: once you take money from several people into a common venture, promising them profits

from your work, the arrangement may be a **security** governed by federal and state securities laws, which require legal compliance.

Hard money is short-term, asset-based lending for projects banks will not finance quickly — buying and rehabbing a BRRRR or a flip. Commonly (examples, as of 2026) it costs one to three **points** upfront and interest around 10–13%, interest-only, for six to eighteen months, with rehab funds released on a **draw schedule** after inspections and limits on the loan as a share of cost or after-repair value. Its true cost is interest plus points plus fees. In this example, a $150,000 loan at 12% for 6 months costs $\$150{,}000 \times 0.12 \div 12 \times 6 = \$9{,}000$ of interest, plus 2 points ($3,000) and $1,500 of fees: $13,500, or 9% of the loan in half a year — about 18% a year. If the project runs 9 months, interest rises to $13,500 and the total to $18,000. Hard money is a tool for a short, well-planned job with a clear exit, never for a long hold.

You will hear of buying "**subject-to**" the existing loan: the buyer takes title while the seller's mortgage stays in the seller's name, and the buyer makes the payments. It is legal in many situations, and it is heavily promoted by sellers of "creative finance" courses. It is not for beginners. The seller's lender may call the whole loan under the due-on-sale clause; if the buyer stops paying, the seller's credit is ruined for a house he no longer owns; insurance and escrow become tangled; and the whole arrangement rests on a distressed seller trusting a stranger. Nehemiah rebuked the nobles of Jerusalem for exacting from their struggling brethren until they lost their fields and houses. Whatever financing you use, deal with sellers and lenders as you would want to be dealt with: plain terms, full disclosure, fair rates and no pressure on people in hard circumstances.

Run the numbers. Short-term financing lives in the **BRRRR** and **Fix & flip** worksheets: set **Purchase price financed** and **Rehab financed** (percents), **Short-term interest rate**, **Lender points** and the months. The tool figures interest as loan × rate ÷ 12 × months and assumes the whole loan is drawn on day one — a conservative choice; put lender fees in buyer closing costs. Always run a version three months longer than planned. For seller financing, use the **Rental** worksheet with the seller's down payment, rate and amortization; the tool does not model the balloon, so compute it by hand or read the projection's loan balance. For a private loan used toward the down payment, subtract its yearly payments from the tool's annual cash flow yourself. The classic mistakes: a balloon with no refinance plan; trusting a seller's word that his loan "won't be a problem"; a handshake loan from family;

budgeting hard money for the hoped-for months instead of the likely ones; and dabbling in subject-to.

PICTURE STUDY



Holland Land Office, Batavia, New York, J. Carl Burke, for the Historic American Buildings Survey, 1965 (building 1815) · Photograph · Library of Congress (HABS NY,19-BAT,3-1)
Image: Wikimedia Commons, public domain

The Holland Land Company built this stone office in Batavia in 1815 to replace its earlier land office, and for years settlers came here to sign contracts and make payments on their farms. Today it is a museum. The photograph was taken in 1965 by J. Carl Burke for the Historic American Buildings Survey, a federal program that has documented the nation's historic architecture since the 1930s. It opens this lesson because this was, in effect, a seller-financing office: the place where a seller turned lender met thousands of buyers who could not pay cash.

Look closely

- Look at the portico and stonework. What impression did the company want to give the settlers who came to pay?
- Find the cannons by the steps. They were placed there later; what do you think the museum wants visitors to remember?
- Notice the 1960s car and wires. How does a photograph like this show a building's whole history, not just its first years?
- Imagine a settler riding in to make a payment he could not fully afford. What would you want the agent behind the counter to do?

Talk about it

1. The company was lenient for years and then sold its contracts to collectors who were strict. Which choice served the settlers better in the long run, and why?
2. Why does a seller who finances a sale need clear written terms and a recorded lien, even with a buyer he trusts?
3. Nehemiah rebuked lenders who took their brothers' fields and houses. How should a Christian seller or lender treat a buyer who falls behind?

PROJECT

Three Term Sheets

You will design three pretend financing offers for one property in your deal binder: a seller-financing offer, a private-money loan from a relative, and a hard-money loan for a rehab version of the deal. For each you will write the key terms, compute payments and costs, and run the deal in the Deal Analyzer. Nothing is sent to anyone; these are practice term sheets for your binder and a parent's review.

You will need

- One property from your deal binder (a house needing some repairs works best)
- A calculator and a spreadsheet for payments and balloons
- The School Launch Deal Analyzer (Rental, BRRRR and Fix & flip worksheets)
- Your deal binder

Steps

1. Seller financing: write a term sheet — price, down payment, amount carried, rate, amortization, balloon year — and compute the payment and balloon. Note whether the seller appears to have a mortgage (check recorded documents if available) and what that would mean.
2. Run the seller-financed purchase in the Rental worksheet and record cash flow, cash-on-cash and DSCR.
3. Private money: write a one-page promissory-note outline for a family loan toward the down payment, listing every term and the recorded security, and subtract its yearly payments from the worksheet's cash flow.
4. Hard money: estimate a rehab budget, then enter a hard-money loan in the BRRRR or Fix & flip worksheet (financed percents, rate, points, months) and record interest and points.
5. Rerun the hard-money case with three extra months and record the change in cost and profit or cash left in.

6. Make a table comparing the three: cash needed, monthly cost, total borrowing cost, key risk.
7. Print the worksheets and write a verdict: which financing, if any, would you use for this property, and what would you refuse? File it in your deal binder.

INVESTOR'S NOTEBOOK

1. Flashcards for seller financing, promissory note, deed of trust or mortgage, installment land contract, due-on-sale clause, private money, hard money, points, interest-only, draw schedule, subject-to and security.
2. Draw two closing diagrams side by side: a seller carry-back (deed to buyer, note and recorded mortgage to seller) and a land contract (seller keeps title until paid). Mark where each side's risk lies.
3. Trap list: a balloon without a plan; the seller's existing mortgage; a handshake family loan; hard money budgeted for the hoped-for months; subject-to sold as "creative finance"; pooled money that may be a security.

KEY FORMULAS

$$\text{Hard-money cost} = \text{loan} \times \frac{\text{rate}}{12} \times \text{months} + \text{loan} \times \text{points}\,\% + \text{fees}$$

$$\text{Annualized cost} \approx \frac{\text{total cost}}{\text{loan}} \times \frac{12}{\text{months}}$$

$$\text{Interest-only payment} = \text{loan} \times \frac{\text{rate}}{12}$$

$$\text{Seller-financed payment} = L \cdot \frac{r}{1-(1+r)^{-n}} \qquad \text{Balloon} = \text{balance after } k \text{ payments}$$

From history. The Garn–St Germain Depository Institutions Act of 1982 made due-on-sale clauses generally enforceable across the country, ending years of state-by-state disputes when interest rates were very high and buyers wanted to take over sellers' cheap old loans. The act also listed exceptions, such as transfers to a spouse or children, transfers to a relative at the borrower's death, and transfers into a living trust in which the borrower remains a beneficiary.

Example 1. In this example, an investor borrows $150,000 of hard money at 12%, interest-only, with 2 points and $1,500 of fees, planning a 6-month rehab. Find the total cost and annualized cost, then the cost if the job runs 9 months. Check in the BRRRR worksheet.

Show solution

1. Interest, 6 months: $\$150{,}000 \times 0.12 \div 12 \times 6 = \$9{,}000$
2. Points: $\$150{,}000 \times 0.02 = \$3{,}000$; total $\$9{,}000 + \$3{,}000 + \$1{,}500 = \$13{,}500$
3. As a share of the loan: $\$13{,}500 \div \$150{,}000 = 9\%$ in 6 months, about $9\% \times 12 \div 6 = 18\%$ a year
4. Nine months: interest $13,500; total $\$13{,}500 + \$3{,}000 + \$1{,}500 = \$18{,}000$
5. In the tool: BRRRR worksheet, Purchase price 150000, Purchase price financed 100, Rehab financed 0, Short-term rate 12, Points 2, Months until refinance 6 — it shows the same interest and points

Answer: $13,500 if all goes to plan (about 18% a year); $18,000 if it runs three months long. Budget the longer case.

Example 2. In this example, a seller sells a $200,000 house she owns free and clear for 10% down and carries $180,000 at 6%, amortized over 30 years with a 7-year balloon. Find the payment, the first month's interest and principal, and the balloon.

Show solution

1. Payment: $\$180{,}000 \times \dfrac{0.005}{1 - 1.005^{-360}} = \$1{,}079.19$
2. First month: interest $\$180{,}000 \times 0.005 = \$900$; principal $\$1{,}079.19 - \$900 = \$179.19$
3. Balance after 84 payments: $\approx \$161{,}350.89$ due as the balloon
4. In the Rental worksheet: Down payment 10, Interest rate 6, Loan term 30 for the payment; compute the balloon by hand

Answer: The buyer pays $1,079.19 a month and must refinance or sell to pay about $161,351 in year 7. Because the seller has no mortgage, there is no due-on-sale risk.

Example 3. In this example, a grandparent offers to lend $50,000 at 8% interest-only for 3 years toward the Cedar Avenue duplex (cash flow $1,706.46 a year from Lesson 3.3). Set out the documents and find the effect on cash flow.

Show solution

1. Documents: a signed promissory note (amount, 8%, monthly payments, 3-year maturity, default terms); a recorded deed of trust or mortgage; a title report; the grandparent named on the insurance; an attorney's review
2. Yearly interest: $\$50{,}000 \times 0.08 = \$4{,}000$; monthly $333.33
3. Cash flow after both loans: $\$1{,}706.46 - \$4{,}000 = -\$2{,}293.54$ a year, $-\$191.13$ a month
4. At year 3 the full $50,000 is due

Answer: The duplex cannot carry a second loan: it would lose about $191 a month and owe $50,000 in three years. Kindness from family is not a reason to borrow for a deal that only works with your own cash.

PRACTICE

1. Easy In this example, a hard-money lender charges 2 points on a $160,000 loan. What do the points cost?

   Show answer

   $\$160{,}000 \times 0.02 = \$3{,}200$, paid upfront.

2. Easy What is six months of interest on the same loan at 12% interest-only?

   Show answer

   $\$160{,}000 \times 0.12 \div 12 \times 6 = \$9{,}600$.

3. Easy In one sentence, what is a due-on-sale clause and why does it matter in seller financing?

   Show answer

   It lets a lender demand full payment when the property is sold or transferred, so if the seller still has a mortgage, a seller-financed sale can trigger that loan.

4. Medium In this example, a seller carries $150,000 at 6.5%, amortized over 30 years with a 5-year balloon. Find the payment and the balloon.

Show answer

Payment $948.10; balance after 60 payments ≈ $140,416 due in year 5.

5. Medium In this example, an uncle lends $40,000 at 7% interest-only. What are the monthly and yearly payments, and what is owed at maturity?

Show answer

$\$40{,}000 \times 0.07 = \$2{,}800$ a year, $233.33 a month; the full $40,000 is due at maturity.

6. Medium In an installment land contract, who holds legal title during the payments, and name one risk to each side.

Show answer

The seller. The buyer risks forfeiture of everything paid (and the seller's own mortgage or liens); the seller risks a buyer who stops paying while living in the property, and must still follow state law to remove him.

7. Medium A hard-money rehab on $160,000 at 12% was planned for 6 months but runs 9. How much extra interest does the delay cost?

Show answer

$\$160{,}000 \times 0.12 \div 12 \times 3 = \$4{,}800$ — plus more months of taxes, insurance and utilities.

8. Hard In this example, a hard-money loan of $200,000 at 11% runs 8 months with 2.5 points and $2,000 of fees. Find the total cost and the approximate annualized cost.

Show answer

Interest $14,666.67, points $5,000, fees $2,000; total $21,666.67 = 10.83% of the loan in 8 months, about $10.83\% \times 12 \div 8 \approx 16.25\%$ a year.

9. Hard In this example, a seller offers 10% down and 6% on a $200,000 house; a bank requires 25% down at 7.5%. Compare cash needed and payments (30-year amortization for both).

Show answer

Seller: $20,000 down, $1,079.19 a month on $180,000. Bank: $50,000 down, $1,048.82 on $150,000. The seller deal saves $30,000 of cash but costs a little more monthly and likely carries a balloon.

10. Hard Give three reasons a beginner should not buy "subject-to" the seller's loan.

Show answer

The lender may call the loan under the due-on-sale clause; the seller's credit is exposed to the buyer's payments; insurance, escrow and trust become tangled — and the deal usually involves a distressed seller who deserves plain, fair dealing.

11. Challenge For the seller-financed loan in the second worked example ($180,000 at 6%, 30-year amortization), how much of the first payment is interest and how much principal? Why does the balloon stay so large?

Show answer

Interest $900, principal $179.19. Early payments are mostly interest on a 30-year schedule, so after 7 years about $161,351 of $180,000 remains.

12. Challenge A friend wants to raise $25,000 each from ten people to buy an apartment building he will run, promising them a share of profits. What legal issue arises, and what should he do?

Show answer

Pooling money from passive investors who expect profits from his work may be a securities offering under federal and state law. He must get a securities attorney and comply before taking anyone's money.

COMMON MISTAKES

- Accepting a balloon without a plan. Know the balloon amount and how you will refinance or sell before signing.
- Ignoring the seller's existing mortgage. Its due-on-sale clause can make the whole loan due; prefer sellers who own free and clear.

- Borrowing from family on a handshake. Use a signed note and a recorded deed of trust or mortgage, and protect the relationship.
- Budgeting hard money for the hoped-for months. Price the likely and the delayed timelines, including points and fees.
- Confusing a land contract with a deed-and-mortgage sale. In a land contract the seller keeps title, and buyers can lose everything paid.
- Treating subject-to or pooled investor money as simple shortcuts. One carries due-on-sale and trust risks; the other may be a regulated security.

Make it a game · The Long Rehab. Each player takes a $150,000 hard-money loan at 12% with 2 points ($3,000) for a 6-month rehab. Each month, roll a die: on a 1 a permit is delayed and the project gains a month; on a 2 a contractor quits and it gains two months; otherwise work continues. After the planned six months, keep rolling until each player rolls a 5 or 6 to finish. Interest is $1,500 a month. Add up each player's points and interest; the lowest total wins. Then discuss: how many months should a careful investor have budgeted, and what reserve would cover the worst roll at the table?

Scripture. "Be not thou one of them that strike hands, or of them that are sureties for debts. If thou hast nothing to pay, why should he take away thy bed from under thee?" (Proverbs 22:26–27, KJV)

Solomon warns against binding yourself to debts you may not be able to pay, and pictures the creditor taking even the bed. Seller notes, family loans and hard money all bind someone — buyer, seller, relative — to promises that hard times will test. Sign only what you can keep, and never ask a struggling seller or a loving relative to carry risk you would not carry yourself.

4.5 Refinancing, HELOCs and the Cost of Money

OBJECTIVES

- Distinguish a rate-and-term refinance from a cash-out refinance and compute a refinance's break-even in months, including the effect of restarting the term.
- State Fannie Mae's cash-out seasoning rules as of 2026 and explain why lenders cap cash-out loan-to-value ratios below purchase limits.
- Compute the cash from a cash-out refinance and the effective cost of the new money, including the higher rate on the old balance.
- Explain how a home equity line of credit works, compute its available line and payment, and weigh the risk of securing an investment with your family's home.
- Compare the cost of capital with a deal's return, explain opportunity cost, and describe interest-rate history without forecasting.

> **Warm-up.** Five minutes. You owe a friend $1,000 at no interest. A store offers you a credit card to "pay off" your friend: the card charges 20% a year but gives you $200 of extra spending money. Write whether you would take it and why. Then write one situation in which replacing one debt with another really would be wise.

WATCH

When Does Refinancing Your Mortgage Make Sense?

The Ramsey Show Highlights · 6:01

https://www.youtube.com/watch?v=J4JLrR5Ic9U

> **WHEN TO WATCH**
> Watch after the third core idea. As the hosts calculate a caller's break-even, do the arithmetic yourself on paper; then write one sentence on what they say about restarting a 30-year term.

BACKUP VIDEO

Cash-Out Refinance vs HELOC: Which Is Right For You? | NerdWallet

NerdWallet · 3:36

https://www.youtube.com/watch?v=HGC6uL5vJzs

A short, clear comparison of cash-out refinancing and HELOCs. Watch after the fifth core idea and make a two-column chart of the differences she names.

KEY TERMS

refinance

Replacing an existing loan with a new loan on the same property.

rate-and-term refinance

A refinance that changes the interest rate or term without taking out more than small closing costs; also called a limited cash-out refinance.

cash-out refinance

A refinance for more than the existing balance, paying the borrower the difference in cash.

break-even (refinance)

The number of months of payment savings needed to recover a refinance's closing costs.

seasoning

A required waiting period — time on title or age of the existing loan — before a lender will allow a refinance, especially a cash-out.

delayed financing

Fannie Mae's exception allowing a cash-out refinance within six months of a documented all-cash purchase, limited to the cash invested and costs.

home equity line of credit (HELOC)

A revolving credit line secured by a home, usually at a variable rate, with a draw period followed by a repayment period.

combined loan-to-value (CLTV)

All loans secured by a property, added together, divided by its value.

cost of capital

What money costs to use — the interest, fees and risk of borrowed funds, or the return given up on your own.

opportunity cost

The value of the best alternative you give up when you choose to use money one way.

variable rate

An interest rate that changes with a published index, so payments can rise or fall.

CORE IDEAS

The story. For most of the twentieth century, Americans bought homes with loans from neighborhood savings and loan associations. A thrift took in passbook savings, paid depositors a modest rate, and lent the money out in long, fixed-rate mortgages. Then, in the late 1970s, inflation climbed into double digits and the Federal Reserve raised interest rates sharply to bring it down. In October 1981 the average 30-year mortgage rate in Freddie Mac's weekly survey reached 18.63 percent. The thrifts were caught. Their old loans still paid the low fixed rates of years before, while their depositors now demanded far more. Many lost money on every old loan they held, a wave of failures followed in the early 1980s, and between 1986 and 1995 more than a thousand thrifts failed; by 1999 taxpayers had borne about $124 billion of the cost. Over the next four decades rates drifted down to a record low of 2.65 percent in January 2021. No one predicted either extreme.

How they figured it out. The thrift crisis taught both sides of the loan the same lesson: the price of money changes, sometimes violently, and whoever is locked into the wrong side of a rate pays for it. Lenders responded by selling more of their fixed-rate loans into the secondary market and offering adjustable rates; borrowers learned to **refinance** whenever rates fell far enough to pay the costs, and refinancing booms followed every big drop. A later lesson came from the other direction. In the mid-2000s, as home prices rose, many owners took cash out of their homes and rentals again and again; when prices fell after 2006, many owed more than their properties were worth, and foreclosures followed. So lenders now cap cash-out loans below purchase loans, require **seasoning** before cash-out, and appraise carefully. Knowing that history — not predicting the next turn — is what keeps an investor humble about rates.

The big idea. A **rate-and-term refinance** replaces a loan to lower the rate or change the term; a **cash-out refinance** borrows more than you owe and hands you the difference. Either way you pay closing costs, so a rate-and-term refinance pays only after its **break-even**: closing costs divided by monthly savings. In this example, refinancing $200,000 from 7.5% to 6.5% (both 30 years) lowers the payment from $1,398.43 to $1,264.14, saving $134.29 a month; with $4,500 of costs, break-even is about 34 months. Watch the term: refinancing a loan you have paid for eight years into a new 30-year loan restarts the clock, so some savings are just payments pushed later. As of 2026, Fannie Mae's cash-out rules require at least one borrower on title

for six months and an existing first mortgage at least twelve months old, with a **delayed financing** exception for properties bought with documented cash within six months.

Cash out is borrowed money, and it is more expensive than it looks. Cash-out loans on rentals are commonly capped around 70–75% of value (an example; check the lender's matrix), and the new rate applies to the *whole* new loan, not just the new cash. In this example, a rental is worth $300,000 and owes $150,000 at 4.25%. A 75% cash-out loan of $225,000 at 7.25%, with $5,000 of costs, pays off the old loan and leaves $70,000. The payment jumps from $836.30 to $1,534.90. First-year interest rises from about $6,375 to about $16,312.50 — an extra $9,937.50, or about 14.2% of the cash received. That is the real **cost of capital**: a new rental bought with that cash must earn more than about 14% just to break even on the borrowing. The BRRRR worksheet's refinance section computes cash out exactly this way.

A **home equity line of credit (HELOC)** is a revolving line secured by your own home. You may draw, repay and draw again during a draw period (often ten years), usually paying interest only at a **variable rate**, then repay principal over a later period. Lenders cap the **combined loan-to-value** of all loans on the home, commonly around 80–90% (examples). In this example, a $450,000 home with a $280,000 mortgage and an 80% CLTV cap supports a line of $360,000 − $280,000 = $80,000. Drawing $40,000 at 8.5% interest-only costs $283.33 a month; if the rate rises to 10.5%, $350. Investors use HELOCs for down payments and rehabs because they are flexible and cheap to open. The danger is plain: if the rental fails, the debt is still secured by the house your family sleeps in. The CFPB explains HELOCs in plain language; read it before anyone signs.

Every dollar has a cost. Borrowed money costs interest and fees; your own cash costs the **opportunity cost** of what else it could do, such as paying off a mortgage at a guaranteed rate. A deal is worth doing only if it earns more than its money costs, after you allow for risk and work. That is why the course keeps comparing cash-on-cash returns with simply paying down debt. Rates themselves move in long cycles that no one predicts reliably, as the thrift crisis and the forty-year fall that followed both showed. Teachers such as Dave Ramsey urge families to avoid borrowing against their homes at all and to pay rentals off; many experienced investors use moderate fixed-rate debt but refuse variable-rate debt against the family home. Both

views take risk seriously, and Paul's word to the Romans — owe no man any thing, but to love one another — weighs on every choice.

Run the numbers. To test a refinance or cash-out on a property you own, use the **BRRRR** worksheet's refinance section: enter the current value as **After-repair value**, the lender's cash-out limit as **Refinance loan-to-value**, the new rate and closing costs, and enter the existing balance as a fully financed purchase price with no rehab, so it stands in for the loan being paid off; the tool shows cash out and the new cash flow and DSCR. In the **Rental** worksheet, the stress-test row "Rate +1 point" shows what a higher refinance rate would do. For a HELOC used toward a down payment, subtract its yearly interest from the tool's cash flow yourself, and test it at a rate two points higher. The classic mistakes: refinancing without computing break-even or noticing the term restart; taking cash out because you can rather than because a better deal is waiting; forgetting seasoning rules; using a variable-rate HELOC on your home to chase a thin deal; and counting cash-out money as if it were profit instead of debt.

PICTURE STUDY



Entrance to the Washington Savings and Loan Association, Seattle, Unknown photographer, September 1914 · Photograph · Museum of History and Industry (MOHAI), Seattle

Image: Wikimedia Commons, public domain

This is the Seattle office of the Washington Savings and Loan Association as it looked in 1914, on the ground floor of the Seattle National Bank building, where it stayed from 1911 to 1921. The lettering proudly lists its assets — about $3.2 million — and calls it a mutual savings society, owned in effect by its depositors. Three years later it took the name Washington Mutual Savings Bank, the institution in the Lesson 4.1 picture. Thrifts like this one made most of America's home loans for decades, and the story of this lesson shows what happened to them when the cost of money rose faster than their old loans could follow.

Look closely

- Read the window. What facts did the association want every passer-by to know?
- Why would a savings and loan advertise the year it was founded and the size of its assets?
- Notice how small and plain the office is. How is it different from the grand lobby in the Lesson 4.1 picture?
- A "mutual" society belonged to its savers. Whose money was being lent out as mortgages here?

Talk about it

1. Thrifts lent for thirty years at fixed rates and paid savers whatever rates the times demanded. Why was that a dangerous match when rates soared?
2. How should a borrower think about a fixed-rate loan when rates are very low or very high — and why is no one able to predict which will come next?
3. Paul wrote, “Owe no man any thing, but to love one another.” How should that verse shape the way an investor thinks about refinancing and home-equity borrowing?

PROJECT

The Refinance Decision

You will decide, with numbers, whether three pretend borrowing moves make sense: a rate-and-term refinance, a cash-out refinance on a rental, and a HELOC on a family home used toward a down payment. Use the example figures below or, with a parent, your family's own approximate numbers (never share them online). Use published example rates labeled as examples.

You will need

- Example figures: a $220,000 loan at 7.25% with 26 years left; a rental worth $320,000 owing $160,000 at 4.5%; a home worth $500,000 owing $300,000
- The CFPB's HELOC explainer (in this unit's kits) and a published weekly average mortgage rate
- The School Launch Deal Analyzer (BRRRR and Rental worksheets) and a calculator
- Your deal binder

Steps

1. Rate-and-term: compute the current payment and the payment at an example new rate for both a new 30-year term and a term matching the years left. Compute the break-even for each with example closing costs.
2. Cash-out: compute the cash available at a 75% example cash-out LTV, the new payment and the effective cost of the new money, as in the second worked example.
3. Run the cash-out in the BRRRR worksheet's refinance section and record the new cash flow and DSCR.
4. HELOC: compute the available line at an 80% example CLTV, the interest-only payment on a $40,000 draw, and the payment two points higher.
5. Choose one deal from your binder and compare its cash-on-cash return with the cost of each borrowing option.

6. Write the case for each move and the case against it, including the Dave Ramsey view and the moderate-debt view in your own words.
7. Print the worksheet and write a verdict for each of the three moves — do it, wait, or refuse — and file it in your deal binder.

INVESTOR'S NOTEBOOK

1. Flashcards for refinance, rate-and-term, cash-out, break-even, seasoning, delayed financing, HELOC, CLTV, cost of capital, opportunity cost and variable rate.
2. Draw a timeline: a 30-year loan taken in year 0, refinanced in year 8 into a new 30-year loan. Shade the extra years of payments the reset adds, and note how a 22-year term would avoid them.
3. Trap list: refinancing without a break-even; ignoring the term reset; cash-out because you can; seasoning surprises; a variable-rate HELOC on the family home for a thin deal; cash-out mistaken for profit.

KEY FORMULAS

$$\text{Refinance break-even (months)} = \frac{\text{closing costs}}{\text{old payment} - \text{new payment}}$$

$$\text{Cash out} = \text{value} \times \text{max cash-out LTV} - \text{existing payoff} - \text{closing costs}$$

$$\text{Cost of new money} \approx \frac{\text{new first-year interest} - \text{old first-year interest}}{\text{cash received}}$$

$$\text{HELOC line} = \text{home value} \times \text{max CLTV} - \text{existing mortgage balance}$$

$$\text{Interest-only HELOC payment} = \text{balance drawn} \times \frac{\text{rate}}{12}$$

From history. Borrowed money keeps costing until it is repaid. In 1648 a Dutch water board raised money to repair its dikes by selling a bond with no maturity date at all — a promise to pay interest forever. Yale University bought one in 2003 for its collection on the history of finance, and in 2015 its curator visited the water board's successor in Utrecht to collect twelve years of back interest, about 132 euros. More than three and a half centuries on, the borrower is still paying.

Example 1. In this example, an owner owes $200,000 at 7.5% and can refinance into a new 30-year loan at 6.5% with $4,500 of closing costs. Find the payments, monthly savings and break-even.

Show solution

1. Old payment (7.5%, 360 months): $1,398.43; new payment (6.5%): $1,264.14
2. Monthly savings: $\$1{,}398.43 - \$1{,}264.14 = \$134.29$
3. Break-even: $\$4{,}500 \div \$134.29 \approx 33.5$ months, about 2 years 10 months
4. Caution: if the old loan had already run several years, the new 30-year term restarts the clock; compare a shorter new term too

Answer: The refinance pays for itself in about 34 months. It makes sense only if the owner expects to keep the property and loan well beyond that.

Example 2. In this example, a rental worth $300,000 owes $150,000 at 4.25% (payment $836.30). A lender offers a 75% cash-out loan at 7.25% for 30 years with $5,000 of costs. Find the cash out, the new payment and the effective cost of the new money.

Show solution

1. New loan: $75\% \times \$300{,}000 = \$225{,}000$; cash out $\$225{,}000 - \$150{,}000 - \$5{,}000 = \$70{,}000$
2. New payment: $1,534.90; increase $698.60 a month, $8,383.20 a year
3. First-year interest, roughly: new $\$225{,}000 \times 0.0725 = \$16{,}312.50$; old $\$150{,}000 \times 0.0425 = \$6{,}375$; extra $9,937.50
4. Cost of the cash: $\$9{,}937.50 \div \$70{,}000 \approx 14.2\%$ a year
5. In the tool: BRRRR worksheet with Purchase price 150000, Purchase price financed 100 and Rehab budget 0 (so the existing balance stands in for the loan being paid off), After-repair value 300000, Refinance LTV 75, Refinance rate 7.25 and Refinance closing 5000 shows the same $70,000 cash out; ignore its purchase-side figures

Answer: $70,000 in hand, but it costs about 14% a year because the whole balance now carries 7.25%. Unless the next deal reliably beats that, leave the cheap old loan alone.

Example 3. In this example, a family home is worth $450,000 with a $280,000 mortgage, and a lender allows 80% CLTV on a HELOC. The owner would draw $40,000 at 8.5% interest-only toward the down payment on the Cedar Avenue duplex (cash flow $142.21 a month). Find the line, the payment and the net monthly result, then test a 2-point rate rise.

Show solution

1. Line: $\$450{,}000 \times 0.80 - \$280{,}000 = \$80{,}000$
2. Payment at 8.5%: $\$40{,}000 \times 0.085 \div 12 = \$283.33$
3. Net: $\$142.21 - \$283.33 = -\$141.12$ a month
4. At 10.5%: payment $350; net −$207.79 a month, and the $40,000 is still owed against the home

Answer: The rental cannot carry the HELOC: the family would pay about $141 to $208 a month from wages and put its own home at risk for a thin deal.

PRACTICE

1. Easy In this example, a refinance costs $3,600 and saves $120 a month. What is the break-even?

   Show answer

   $\$3{,}600 \div \$120 = 30$ months.

2. Easy In one sentence each, define a rate-and-term refinance and a cash-out refinance.

   Show answer

   A rate-and-term refinance replaces a loan to change its rate or term without taking out meaningful cash; a cash-out refinance borrows more than the existing balance and pays the borrower the difference.

3. Easy As of 2026, what seasoning does Fannie Mae require for a cash-out refinance, and what is the delayed-financing exception?

   Show answer

   At least one borrower on title for six months and an existing first mortgage at least twelve months old. Delayed financing allows cash-out within six months of a documented all-cash purchase, up to the cash invested plus costs.

4. Medium In this example, $200,000 is refinanced from 7% to 6% (both 30 years) with $4,000 of closing costs. Find the savings and break-even.

Show answer

Payments $1,330.60 and $1,199.10; savings $131.50; break-even $4,000 ÷ $131.50 ≈ 30.4 months.

5. Medium In this example, a rental worth $250,000 owes $120,000. A lender allows 75% LTV on a cash-out with $4,500 of costs. How much cash comes out?

Show answer

$0.75 \times \$250{,}000 - \$120{,}000 - \$4{,}500 = \$187{,}500 - \$124{,}500 = \$63{,}000.$

6. Medium In this example, a home is worth $400,000 and owes $250,000; a lender allows 85% CLTV. What HELOC line is available?

Show answer

$0.85 \times \$400{,}000 - \$250{,}000 = \$340{,}000 - \$250{,}000 = \$90{,}000.$

7. Medium What is the interest-only payment on a $30,000 HELOC balance at 9%? At 11%?

Show answer

$\$30{,}000 \times 0.09 \div 12 = \$225$; at 11%, $275. Variable rates move payments without your permission.

8. Hard An owner is eight years into a 30-year loan and refinances into a new 30-year loan to lower the payment. What is the hidden cost, and how could she avoid it?

Show answer

She will make payments for 38 years in all, paying interest longer. She could choose a term near 22 years, or keep paying the old payment amount on the new loan.

9. Hard In this example, an owner replaces $140,000 at 4% with a $200,000 cash-out loan at 7%, paying $4,000 of costs. Estimate the first-year cost of the new money.

Show answer

Cash received $\$200{,}000 - \$140{,}000 - \$4{,}000 = \$56{,}000$. Extra interest about $\$14{,}000 - \$5{,}600 = \$8{,}400$; $\$8{,}400 \div \$56{,}000 = 15\%$ a year.

10. Hard Should the owner in problem 9 use that cash for a rental with a 6% cash-on-cash return? Explain.

Show answer

No. The money costs about 15% a year and the rental returns 6% in cash; the gap would be paid from other income. Principal paydown and hoped-for appreciation do not close a nine-point gap safely.

11. Challenge In this example, you have $50,000. You could prepay a 6.5% mortgage or buy a rental expected to return 4% cash-on-cash plus principal paydown and possible appreciation. Compare the first-year cash benefit of each and name the opportunity cost.

Show answer

Prepaying saves about $\$50{,}000 \times 0.065 = \$3{,}250$ of interest, guaranteed. The rental yields about $2,000 of cash flow, plus uncertain gains, plus work and risk. Choosing the rental gives up a certain $3,250; it must earn more than that, after risk, to be worth it.

12. Challenge Freddie Mac's survey shows 30-year rates of 18.63% in October 1981 and 2.65% in January 2021. Find the monthly payment on $200,000 for 30 years at each rate. What should this teach a young investor?

Show answer

About $3,117.17 versus $805.93 — almost four times as much. Rates swing widely over a lifetime and cannot be predicted reliably, so buy only deals that survive higher rates, prefer fixed rates on long holds, and never assume a refinance will be available.

COMMON MISTAKES

- Refinancing without computing break-even. Divide closing costs by monthly savings and compare with how long you will keep the loan.
- Ignoring the term reset. A new 30-year loan on an aging mortgage can lower the payment while raising total interest.
- Thinking cash-out costs only the rate on the new cash. The new rate applies to the whole balance, so the true cost of the cash can be far higher.
- Forgetting seasoning. Cash-out commonly requires time on title and a seasoned first mortgage (as of 2026, six and twelve months with Fannie Mae).

- Using a variable-rate HELOC on the family home for a thin deal. Test the payment at a higher rate and remember what secures it.
- Treating cash-out money as profit. It is debt that must be repaid from the property or your income.

Make it a game · Refi or Not?. Write twelve cards, each with a loan balance, current rate, offered rate, closing costs and years the owner plans to stay. Players race to compute the monthly savings (use the payment-per-$1,000 table you make from the Deal Analyzer: at 30 years, 6% ≈ $6.00, 6.5% ≈ $6.32, 7% ≈ $6.65, 7.5% ≈ $6.99) and the break-even in months, then call REFI or STAY based on whether the owner will keep the loan past break-even. A correct call scores a point. Wild cards add "cash-out to buy a 5% deal at 7.5%" — anyone who calls REFI on those loses two points.

Scripture. "Owe no man any thing, but to love one another: for he that loveth another hath fulfilled the law." (Romans 13:8, KJV)

Paul tells believers to leave no debt unpaid and to count love as the one debt always owed. Christians weigh this verse differently — some avoid borrowing entirely, others borrow carefully and repay faithfully — but no reading allows borrowing carelessly or against the security of one's family. Every refinance and home-equity line should be tested against it.

UNIT 4

Financing the Small Investor

In 1906, with San Francisco still smoking, A. P. Giannini set a plank across two barrels and lent money to neighbors who wanted to rebuild. Every loan since has asked his questions: who is borrowing, against what, on what terms, and can it be repaid? This unit teaches you how small investors borrow — and when they should not. You will learn why most lenders follow the rulebooks of **Fannie Mae** and **Freddie Mac**, and what those rules require of **investment-property loans** as of 2026: larger down payments, **reserves**, a limit on financed properties, and only part of the rent counted toward **debt-to-income**. You will see why **owner-occupant loans** — FHA, VA and conventional — offer far better terms on one to four units to people who truly live there, and why lying about occupancy is a crime.

Then you will meet the lenders beyond the standard rulebooks: **DSCR loans** that qualify the property instead of your paycheck, **portfolio** and **commercial** loans from local banks, **seller financing**, family **private money** and short-term **hard money**. Finally you will learn when a **refinance**, a cash-out or a **home equity line** makes sense, and what money really costs. Every loan rule here is labeled with its source and "as of 2026" because rules change; every rate is an example. And every lesson presents both the case for careful, limited debt and the case for paying cash, so your family can decide.

PREREQUISITES

- Can compute NOI, debt service, cash flow, cash-on-cash and DSCR, and run the Rental worksheet (Unit 3)
- Can use the loan payment formula or the Deal Analyzer to find a monthly principal-and-interest payment
- Has at least three analyzed properties with printed worksheets and verdicts in the deal binder
- Can explain leverage, reserves and the borrower's burden from Lesson 1.2

MASTERY CHECKLIST

- ☐ I can state Fannie Mae's 2026 investment-loan limits — maximum LTV, reserves, financed-property count and DTI — and say where to check them.
- ☐ I can compute net rental income for qualifying (75% of rent minus PITIA), a borrower's DTI and the total cash needed to close, including reserves.
- ☐ I can compare two Loan Estimates and compute the break-even for discount points.
- ☐ I can state FHA, VA and conventional owner-occupant rules for one to four units as of 2026, apply FHA's self-sufficiency test, and explain why occupancy fraud is a crime.
- ☐ I can compute a property's DSCR the lender's way and the true way, and find the largest loan allowed by a DSCR and an LTV limit.
- ☐ I can compute balloon balances and the true cost of hard money, and set out the written terms and recorded security every private loan needs.
- ☐ I can compute a refinance's break-even, a cash-out's proceeds and the effective cost of the new money, and a HELOC's available line and payment.
- ☐ I can explain the due-on-sale clause, recourse debt, subject-to

risks and the opportunity cost of money, and present both the moderate-debt and no-debt views fairly.

OPTIONAL BOOKS AND RESOURCES FOR THIS UNIT

- **School Launch Deal Analyzer**: Free. Change the down payment, rate, mortgage insurance and closing costs on the Rental and House hack worksheets, and the short-term financing and refinance inputs on the BRRRR and Fix & flip worksheets, to see how each loan changes a deal. Used in every lesson. Ages 13 and up.
- **CFPB: Loan Estimate explainer**: Free, official. The Consumer Financial Protection Bureau's interactive guide to every line of the three-page Loan Estimate, with a sample form. Use it for the Lesson 4.1 project. Ages 14 and up.
- **HUD: Single Family Housing Policy Handbook 4000.1**: Free, official. The page where HUD posts the current FHA rulebook (a long PDF updated through 2026). Use its search to find the minimum down payment, occupancy, rental-income and three- to four-unit self-sufficiency rules taught in Lesson 4.2, and check every FHA figure against it before relying on it. Ages 15 and up, with a parent.
- **CFPB: What is a home equity line of credit (HELOC)?**: Free, official. A short, plain explanation of how HELOCs work, including draw periods, variable rates and the risk to your home. Read it before the Lesson 4.5 project. Ages 14 and up.
- **Small and Mighty Real Estate Investor, by Chad Carson (BiggerPockets Publishing)**: A printed book from the publisher's own store. Chad Carson argues for a small, carefully financed portfolio and explains seller financing, local-bank loans and paying debt down — a thoughtful companion to Lessons 4.3–4.5. Ages 15 and up.

Not required. Every project in this unit works without them. School Launch has no ties to these authors, publishers or companies.

LESSONS IN THIS UNIT

4.1 Investment-Property Loans: Down Payments, Reserves and Qualifying

3 sessions of 50 minutes

4.2 Owner-Occupant Loans on One to Four Units 3 sessions of 50 minutes

4.3	**DSCR Loans, Portfolio Lenders and Local Banks**	3 sessions of 50 minutes
4.4	**Seller Financing, Private Money and Hard Money**	3 sessions of 50 minutes
4.5	**Refinancing, HELOCs and the Cost of Money**	3 sessions of 50 minutes

Unit 4 test

Closed notes and closed notebook; a basic calculator is allowed. Twenty four-choice questions, 5 points each, 100 points total. Allow about two minutes per question — set a timer for 40 minutes. Show the arithmetic for every calculation question on scratch paper, and choose the one BEST answer. Aim for 80% (16 of 20) or better, and rework every miss in your investor's notebook. Loan rules are stated as of 2026 from Fannie Mae, HUD and VA sources and may change; figures marked "in this example" are examples, and real rates, fees and limits vary by lender and year.

1. **5 pts**

   Why do most lenders follow Fannie Mae's or Freddie Mac's rules when making conventional loans?

   A. Federal law requires every mortgage to meet their rules

   B. Lenders plan to sell the loans to them, so the loans must meet their standards

   C. They insure every conventional loan against default

   D. They set the interest rate on every loan

2. **5 pts**

   As of 2026, Fannie Mae's Eligibility Matrix allows a maximum LTV of 85% on a one-unit investment purchase. What is the minimum down payment on a $260,000 single-family rental?

   A. $65,000

   B. $9,100

   C. $13,000

   D. $39,000

3. 5 pts

How do lenders following Fannie Mae's 2026 guide commonly count rent from a rental being purchased?

A. 75% of gross rent, minus the property's full PITIA

B. 100% of gross rent added to income

C. Only rent already received for two years

D. NOI from the buyer's own worksheet

4. 5 pts

In this example, the appraiser's market rent on a rental being bought is $2,200 and its PITIA is $1,800. How does the lender treat it?

A. +$400 added to income

B. +$1,650 added to income

C. −$150 counted as a monthly debt

D. It is ignored

5. 5 pts

In this example, an investment purchase has PITIA of $1,700, and the buyer owns two other financed rentals with combined balances of $200,000. Using Fannie Mae's 2026 reserve rules, what reserves are required?

A. $10,200

B. $14,200

C. $4,000

D. $20,400

6. 5 pts

In this example, paying $3,000 in discount points lowers a monthly payment by $50. What is the break-even?

A. 30 months

B. 50 months

C. 6 months

D. 60 months

7. 5 pts

Which statement about FHA loans is correct as of 2026, according to HUD's handbook?

A. With a credit score of 580 or higher, the maximum LTV on a purchase is 96.5%, and a borrower must occupy the home

B. FHA loans may be used for investment properties of up to four units

C. FHA loans require 20% down on duplexes

D. FHA loans carry no mortgage insurance

8. 5 pts

A buyer applies for an owner-occupant loan on a fourplex, certifying he will live there, while planning to rent all four units and never move in. This is:

A. A common and acceptable strategy

B. Allowed if he moves in within five years

C. Occupancy fraud, a knowingly false statement on a loan application

D. Allowed if the units cash-flow

9. 5 pts

In this example, an FHA fourplex has fair market rent of $1,250 per unit (appraiser's vacancy and maintenance estimate 20%) and PITI of $4,000. How does it fare on the self-sufficiency test?

A. Passes at 80%

B. Fails at about 107%

C. Passes at about 94%

D. Fails at 125%

10. 5 pts

According to va.gov, which is true of a VA-backed purchase loan?

A. It requires 3.5% down

B. It can be used for investment properties the veteran does not occupy

C. It is limited to single-family homes

D. It can require no down payment if the price is not above the appraised value, and the veteran must live in the home

11. 5 pts

Under the Homeowners Protection Act, when must a lender automatically end PMI on a conventional loan that is current?

A. When the balance is scheduled to reach 78% of the home's original value

B. After five years

C. When the balance reaches 90% of value

D. Never; PMI lasts for the life of the loan

12. 5 pts

A DSCR lender approves a rental because rent ÷ PITIA is 1.30, but the investor's own NOI ÷ debt service is 0.96. What is the best conclusion?

A. The property will cash-flow, because the lender approved it

B. The lender made an arithmetic error

C. The lender's ratio ignores vacancy and operating costs; the property will likely lose money

D. DSCR does not matter for small rentals

13. 5 pts

In this example, a property's NOI is $24,000. A bank requires DSCR 1.20 at 7% for 30 years ($0.0066530 per month per dollar) and lends no more than 75% of a $320,000 appraisal. How much will it lend?

A. About $250,500

B. $240,000

C. $288,000

D. $200,000

14. 5 pts

A five-unit building is financed with a commercial loan amortized over 25 years with a 5-year term. What is the main risk the owner must plan for?

A. The payment will rise every month

B. The loan cannot be prepaid

C. The interest is not deductible

D. A large balloon comes due in year 5 and must be refinanced or paid, possibly at higher rates

15. 5 pts

An investor's bank loan is recourse, with a personal guarantee. If the property is foreclosed and sells for less than the debt, what can happen?

A. The lender may pursue the investor's other assets for the shortfall

B. The debt is automatically forgiven

C. The lender can take only the property

D. The investor's LLC absorbs all losses

16. 5 pts

A seller with an existing mortgage offers to finance your purchase herself and "keep paying her loan." What is the most important risk?

A. The interest rate will be too low

B. Seller-financed loans cannot have balloons

C. Her mortgage's due-on-sale clause may let her lender demand full payment after the sale

D. You cannot record the deed

17. 5 pts

In this example, a hard-money loan of $120,000 at 12% interest-only runs 6 months, with 2 points and $1,000 of fees. What is the total borrowing cost?

A. $7,200

B. $10,600

C. $9,600

D. $14,400

18. 5 pts

A grandparent offers to lend you $40,000 toward a rental. What is the best practice?

A. Keep it informal to protect the relationship

B. Promise to repay "when the property sells"

C. Take the money as a gift and say nothing

D. Sign a promissory note with clear terms, secure it with a recorded deed of trust or mortgage, and name the lender on the insurance

19. 5 pts

In this example, a refinance costs $4,800 and lowers the payment by $150 a month. What is the break-even?

A. 32 months

B. 48 months

C. 15 months

D. 24 months

20. 5 pts

A family considers a variable-rate HELOC on its home to fund the down payment on a rental that cash-flows $100 a month. What is the greatest risk?

A. HELOCs cannot be used for real estate

B. HELOC interest is always higher than 20%

C. The family home secures the debt, and a rising rate could turn the deal into a monthly loss

D. The rental's cap rate will fall

ANSWER KEY

1. B. Fannie Mae and Freddie Mac buy loans in the secondary market, so lenders write loans to their guides in order to sell them. Portfolio and DSCR lenders, who keep or sell loans elsewhere, set their own rules — so A is false.
2. D. $\$260{,}000 \times 15\% = \$39{,}000$. A is 25%, the two- to four-unit investment minimum; B and C are owner-occupant figures (3.5% and 5%).
3. A. The lender takes 75% of the lease or appraiser's market rent and subtracts PITIA; a positive result adds to income and a negative one counts as debt. B ignores vacancy and expenses entirely.
4. C. $0.75 \times \$2{,}200 - \$1{,}800 = \$1{,}650 - \$1{,}800 = -\$150$, which is added to monthly debts. A uses 100% of the rent.
5. B. Six months of PITIA, $\$10{,}200$, plus $2\% \times \$200{,}000 = \$4{,}000$ for other financed properties: $\$14{,}200$. A forgets the other properties.
6. D. $\$3{,}000 \div \$50 = 60$ months. If you expect to sell or refinance within five years, the points do not pay.
7. A. That is the 3.5% minimum down payment, and at least one borrower must move in within 60 days and intend to stay a year. FHA charges upfront and annual premiums, so D is false.
8. C. Misstating occupancy to get owner-occupant terms is mortgage fraud and a federal crime. Moving out after genuinely living there for the required period is a different, lawful matter.
9. B. Net income $\$5{,}000 - 25\% \times \$5{,}000 = \$3{,}750$ (the greater of 20% or 25%); $\$4{,}000 \div \$3{,}750 \approx 107\%$, above the 100% limit. A divides by gross rent without the deduction.
10. D. VA loans can have no down payment and no PMI, may carry a funding fee, cover homes of up to four units, and require occupancy. C is wrong: up to four units are allowed.
11. A. Borrowers may request cancellation at 80% of original value, and it ends automatically at 78% on schedule. FHA mortgage insurance follows different rules.
12. C. Many DSCR lenders compare rent with PITIA, leaving out vacancy, repairs, CapEx and management. The NOI-based figure below 1.00 means the income does not cover the payment.
13. B. DSCR limit: $\$24{,}000 \div 1.20 \div 12 = \$1{,}666.67$ a month, $\div 0.0066530 \approx \$250{,}513$. LTV limit: $\$240{,}000$. The bank lends the lesser. A ignores the LTV cap.

14. D. Most of the principal remains after five years. If rates rise or NOI falls, refinancing may require more cash or fail.
15. A. Recourse means personal liability beyond the property. C describes a non-recourse loan.
16. C. Under the Garn–St Germain Act of 1982, due-on-sale clauses are generally enforceable, so the sale can trigger her loan. Seller financing is cleanest when the seller owns free and clear.
17. B. Interest $\$120{,}000 \times 0.12 \div 12 \times 6 = \$7{,}200$, points $\$2{,}400$, fees $\$1{,}000$: $\$10{,}600$. A counts interest only.
18. D. Written terms and recorded security protect both the lender and the relationship. A handshake loan invites misunderstanding and leaves the lender unprotected.
19. A. $\$4{,}800 \div \$150 = 32$ months. The refinance pays only if the owner keeps the loan longer than that — and the term reset must be considered too.
20. C. If the rental fails or rates rise, the family must pay from wages, and the debt is secured by the house it lives in. The HELOC's cost must be compared honestly with the deal's return.

PORTFOLIO PIECE: DEAL BINDER: FINANCING THE SMALL INVESTOR

This unit adds a financing section to your deal binder. File the Lender's File (4.1) with its DTI, reserve and Loan Estimate calculations; the House-Hack Financing Sheet (4.2) with House hack worksheets at two down payments and, for three or four units, the FHA self-sufficiency test; Three Ways to Borrow (4.3) comparing conventional, DSCR and portfolio terms with both DSCR calculations; Three Term Sheets (4.4) for seller financing, a family loan and hard money with a delayed-project case; and the Refinance Decision (4.5) with break-even, cash-out cost and HELOC calculations.

Each item ends with a verdict a parent can question aloud: would a lender approve this, should the borrower accept it, and what would you refuse? Credit goes to clear, honest reasoning — including the decision not to borrow.

LOOK FOR	WHAT IT MEANS
Rules stated accurately	Every loan rule (LTV, reserves, DTI, occupancy, self-sufficiency, seasoning) is stated correctly, labeled "as of 2026" with its source, and every rate or fee is labeled an example.
Correct calculations	Net rental income, DTI, reserves, payments, balloons, break-even months, hard-money cost, cash-out proceeds and HELOC lines are worked by hand and agree with the Deal Analyzer where it applies.
True coverage, not just approval	Each financing option is judged by NOI-based DSCR and cash flow after all costs, not merely by whether a lender would approve it.
Risk and honesty	Balloons, variable rates, recourse, due-on-sale, occupancy and securities issues are identified where they apply, and every private or seller arrangement is written and secured.
Defended verdicts	Each verdict weighs the moderate-debt and no-debt views fairly, cites the numbers, and says plainly what the student would do and refuse.

UNIT 5

House Hacking and Small Multifamily

In 1863 a tailor named Lucas Glockner built a tenement on Orchard Street and moved his family into it, letting his tenants' rent carry the building. In 1888 a Worcester mason named John Mark built a brick three-decker and lived on one floor. This unit teaches the oldest and most dependable first step in small-property investing: living in part of what you own. You will compute a **house hack**'s true **net housing cost** and compare it honestly with renting; weigh **rent-by-the-room** against renting a house whole and learn how the **live-in flip** uses the home-sale exclusion; analyze **duplexes, triplexes and fourplexes** with their utilities, other income and the FHA **self-sufficiency test**; and see why a building of five or more units becomes a **commercial** property valued by NOI ÷ **cap rate**.

You will finish with **accessory dwelling units** and other ways zoning can add value, using the Washington and Oregon laws as verified examples. Every lesson uses the House hack or Rental worksheet of the Deal Analyzer, and every project ends with a printed worksheet and a verdict in your deal binder. Expect the numbers to be humbling: at today's prices and rates, many house hacks save only a little cash while you live in them and lose money when you move out. Learning to see that before buying — and to negotiate or walk away — is the skill.

PREREQUISITES

- Can compute GSI, vacancy, EGI, operating expenses, NOI, cash flow, cap rate, cash-on-cash and DSCR by the Deal Analyzer's conventions (Unit 3)
- Has run the Rental worksheet on at least three real listings and filed the verdicts in the deal binder
- Can explain the difference between owner-occupant and investment-property loans and what mortgage insurance is (Unit 4)
- Can find and adjust rent comparables for a unit (Lesson 2.3)

MASTERY CHECKLIST

- ☐ I can compute a house hacker's net monthly housing cost line by line and compare it with the market rent of a similar home.
- ☐ I can separate principal paydown from cash cost and explain why selling costs and uncertain appreciation limit its value.
- ☐ I can state the occupancy requirement of owner-occupant loans and explain why occupancy fraud is a crime.
- ☐ I can compare renting a house whole with renting it by the room using NOI, and list the legal and family questions room rentals raise.
- ☐ I can apply the Section 121 ownership and use tests and compute gain from amount realized and adjusted basis for a live-in flip.
- ☐ I can analyze a duplex, triplex or fourplex with owner-paid utilities and other income, and apply the FHA self-sufficiency test.
- ☐ I can value a five-plus-unit building by NOI ÷ cap rate, compute forced appreciation and size a loan by DSCR and LTV.

- ☐ I can compute an ADU's NOI, payback and cash-on-cash with and without a loan, and summarize the Washington and Oregon ADU laws as of 2026.

OPTIONAL BOOKS AND RESOURCES FOR THIS UNIT

- **School Launch Deal Analyzer**: Free. The House hack worksheet computes your net monthly housing cost, first-year principal and the move-out view; the Rental worksheet handles duplexes through apartment buildings and ADUs. Used in every lesson of this unit. Ages 14 and up.
- **Craig Curelop, The House Hacking Strategy (BiggerPockets Publishing)**: A printed book by a young investor who house hacked with rooms and small multifamily; practical on finding, financing and managing a house hack. Read it alongside Lessons 5.1–5.3 and check its numbers in the Deal Analyzer, since rates and prices have changed. Ages 15 and up.
- **HUD: Single Family Housing Policy Handbook 4000.1**: Free, official. The FHA rulebook: occupancy, maximum financing, the three- and four-unit self-sufficiency test, rental income and ADU rules. Search it during Lessons 5.1, 5.3 and 5.5 to confirm any FHA rule as of the current date. Ages 15 and up.
- **CFPB: Buying a House**: Free, official. The Consumer Financial Protection Bureau's step-by-step guide to loan options, Loan Estimates and closing for owner-occupant buyers. Use it with Lesson 5.1 to understand what a first home loan involves. Ages 14 and up.
- **Washington State Legislature: RCW 36.70A.681 (Accessory dwelling units)**: Free, official. The text of Washington's statewide ADU rules — two ADUs per lot in urban growth areas, no owner-occupancy requirement, impact-fee and parking limits. Read it with Lesson 5.5; Oregon students read ORS 197A.425 on the Oregon Legislature's site instead. Ages 15 and up.

Not required. Every project in this unit works without them. School Launch has no ties to these authors, publishers or companies.

LESSONS IN THIS UNIT

5.1	**House Hacking: Living for Less While You Learn**	3 sessions of 50 minutes
5.2	**Rent-by-the-Room and the Live-In Flip**	3 sessions of 50 minutes

5.3 Duplexes, Triplexes and Fourplexes 3 sessions of 50 minutes

5.4 Five Units and Up: When Multifamily Becomes Commercial
3 sessions of 50 minutes

5.5 Accessory Dwelling Units and Adding Value with Zoning 3 sessions of 50 minutes

Unit 5 test

Closed notes, basic calculator. Twenty four-choice questions, 5 points each, 100 points total. Allow about two minutes per question — set a timer for 40 minutes. Show the arithmetic for every calculation question on scratch paper, and choose the one best answer. Aim for 80% or better, and rework every miss. Figures marked “in this example” are examples; real rates, rents, prices, taxes and loan rules vary by place and year.

1. **5 pts**
   In this example, a house hacker’s monthly P&I is $1,600, mortgage insurance $120, taxes and insurance total $4,800 a year, and owner-paid utilities $100 a month. Repairs and CapEx are 13% of the building’s total market rent of $2,600, and the other unit rents for $1,300 with 5% vacancy. What is the net monthly housing cost?
   A. $1,323
   B. $985
   C. $1,658
   D. $1,288

2. **5 pts**
   Under FHA rules as of 2026, what must an owner-occupant borrower do?
   A. Live in the property for at least five years before renting any unit
   B. Live in the property only if it has three or four units
   C. Move in within 60 days and intend to occupy it for at least one year
   D. Occupy it for 30 days, then rent every unit

3. 5 pts

As of 2026, what is the maximum FHA loan-to-value for a purchase by a borrower with a credit score of 580 or higher?

A. 80%

B. 96.5%

C. 100%

D. 75%

4. 5 pts

A buyer tells a lender that a fourplex will be his principal residence so that he can put 3.5% down, though he intends to keep living with his parents and rent all four units. This is:

A. A legal house hack, since he owns the building

B. Allowed if he moves in later

C. A normal practice called the live-in flip

D. Occupancy fraud, a federal crime

5. 5 pts

Which statement about principal paydown in a house hack is most accurate?

A. It is cash flow you can spend each month

B. It builds equity, but it cannot pay bills and selling costs can consume years of it

C. It replaces the need for repair and CapEx savings

D. It is guaranteed to equal the rent you would have paid

6. 5 pts

A four-bedroom house rents whole for $2,400 or by the room for $3,400. What is the right way to compare the two plans?

A. Compare gross rents; the room plan earns $1,000 a month more

B. Compare the number of tenants

C. Compare NOI after the room plan’s higher vacancy, owner-paid utilities, furniture, repairs and management

D. Compare the 1% rule for each plan

7. 5 pts

To exclude gain under Section 121, a seller generally must have:

A. Owned and used the home as a main home for at least two of the five years before the sale

B. Owned the home at least five years in a row

C. Bought another, more expensive home within two years

D. Been at least 55 years old

8. 5 pts

In this example, a live-in flipper bought for $300,000 with $5,000 of basis purchase costs, made $40,000 of capital improvements and sold for $420,000 with 7% selling costs. What is the gain?

A. $75,000

B. $45,600

C. $120,000

D. $90,600

9. 5 pts

In this example, a triplex's FHA PITI would be $3,400 a month and the appraiser's fair market rent for all three units, including the buyer's, totals $4,400. Using the 25% factor, the self-sufficiency test:

A. Passes at 77%

B. Passes, because $4,400 exceeds $3,400

C. Does not apply to triplexes

D. Fails at about 103%

10. 5 pts

In the FHA self-sufficiency test, which rents are used?

A. Only the units the borrower will rent out

B. The seller's current lease rents

C. The appraiser's fair market rent for all units, including the borrower's

D. 75% of the highest rent in the building times the number of units

11. 5 pts

A fourplex has one water meter and one gas meter for the whole building, and each unit has its own electric meter. The owner most likely pays:

A. Water and gas, because they are master-metered

B. Only electricity

C. No utilities, since tenants always pay

D. Every utility, including each unit’s electricity

12. 5 pts

In this example, a duplex adds $200 a month of laundry income. Using the Deal Analyzer with 5% vacancy, 6% repairs, 7% CapEx and 9% management, how much does annual NOI rise?

A. $2,400.00

B. $1,762.80

C. $2,280.00

D. $1,968.00

13. 5 pts

Why is a fourplex usually appraised mainly by comparable sales rather than by NOI ÷ cap rate?

A. Fourplexes have no NOI

B. Federal law forbids the income approach for small buildings

C. Cap rates do not exist below 50 units

D. Two- to four-unit buildings are residential property bought by owner-occupants and small investors, so similar sales are the best evidence

14. 5 pts

In this example, a ten-unit building has NOI of $63,000 and similar buildings sell at a 7% cap rate. What is its indicated value?

A. $441,000

B. $630,000

C. $900,000

D. $1,100,000

15. 5 pts

In this example, an owner raises a building's NOI by $5,600 a year, and the market cap rate is 8%. About how much value is created?

A. $70,000

B. $44,800

C. $5,600

D. $56,000

16. 5 pts

A commercial lender limits a loan to a 1.25 DSCR and a 75% LTV. The DSCR test allows $560,000 and the LTV test allows $600,000. The maximum loan is:

A. $600,000

B. $560,000

C. $580,000

D. $1,160,000

17. 5 pts

A sponsor asks several families to pool $25,000 each to buy an apartment building he will manage, promising a share of profits. What should everyone understand first?

A. Pooled real estate investments are always unregulated

B. Only the bank's approval matters

C. The interests are commonly securities, requiring registration or an exemption and truthful disclosure

D. A handshake agreement is enough among friends

18. 5 pts

In this example, an ADU costs $140,000 in cash and produces NOI of $10,000 a year. What are its payback period and cash-on-cash return?

A. 10 years and 10%

B. 1.4 years and 140%

C. 7 years and 14%

D. 14 years and about 7.1%

19. 5 pts

As of 2026, Washington's RCW 36.70A.681 requires covered cities and counties to:

A. Require owners to live on any lot with an ADU

B. Allow only one ADU per lot

C. Forbid all restrictions on ADUs used as short-term rentals

D. Allow at least two ADUs on lots in urban growth areas that allow single-family homes, without an owner-occupancy requirement

20. 5 pts

In this example, an ADU earns NOI of $14,320 on a $180,000 cost, and the owner borrows the full cost on a loan with $18,067 of annual payments. This is best described as:

A. Negative leverage — the debt turns a positive NOI into a cash loss of about $3,747 a year

B. Forced appreciation

C. Positive leverage, because borrowing always raises returns

D. A 1.26 DSCR

ANSWER KEY

1. A. Fixed costs $\$4{,}800 \div 12 + \$100 = \$500$; reserves $0.13 \times \$2{,}600 = \$338$; rent in $0.95 \times \$1{,}300 = \$1{,}235$; net $\$1{,}600 + \$120 + \$500 + \$338 - \$1{,}235 = \$1{,}323$. B leaves out the repair and CapEx savings.
2. C. HUD Handbook 4000.1 requires at least one borrower to occupy within 60 days of signing and intend to stay at least one year. There is no five-year rule (A), and the requirement applies to every FHA property type.
3. B. HUD's maximum is 96.5% of the adjusted value — a 3.5% down payment. 100% financing (C) is a VA feature when the price does not exceed the appraised value.
4. D. Owner-occupant terms are granted on the promise to live there; lying to obtain them is occupancy fraud. It is not a house hack (A) or a live-in flip (C), both of which require actually living in the property.
5. B. Principal reduces the loan and builds equity, but it is not spendable cash, and 6–8% selling costs can erase several years of it. Treating it as cash flow (A) is the classic mistake.
6. C. Room rentals raise gross rent and expenses together; in the lesson's example a 42% higher gross rent produced only about $382 a year more NOI. Comparing gross (A) misleads.
7. A. The ownership and use tests each require two years within the five ending on the sale date, not necessarily continuous. C and D describe the pre-1997 rules that Section 121 replaced.
8. B. Amount realized $\$420{,}000 - \$29{,}400 = \$390{,}600$; adjusted basis $\$300{,}000 + \$5{,}000 + \$40{,}000 = \$345{,}000$; gain $\$45{,}600$. A forgets the selling costs.
9. D. Net rental income $0.75 \times \$4{,}400 = \$3{,}300$; ratio $\$3{,}400 \div \$3{,}300 \approx 103\%$ — over 100%. B forgets the 25% deduction; the test applies to three- and four-unit properties.
10. C. HUD uses the appraiser's fair market rent from all units, including the one the borrower will occupy, minus the greater of the appraiser's vacancy and maintenance estimate or 25%.
11. A. Master-metered utilities bill to the owner unless a lawful bill-back recovers part of them; separately metered electricity goes to the tenants. Always confirm with twelve months of bills.
12. B. $\$2{,}400 - 0.05 \times \$2{,}400 - 0.13 \times \$2{,}400 - 0.09 \times \$2{,}280 = \$2{,}400 - \$120 - \$312 - \$205.20 = \$1{,}762.80$. A ignores the percentage expenses the tool applies

to other income.

13. D. Small multifamily is appraised on Form 1025, mainly by sales of similar buildings, with a rent schedule and GRM. Forced appreciation through NOI is therefore limited compared with five-plus-unit buildings.
14. C. $\$63{,}000 \div 0.07 = \$900{,}000$. A multiplies instead of dividing.
15. A. $\$5{,}600 \div 0.08 = \$70{,}000$ — \$12.50 of value per \$1 of NOI at an 8% cap rate. B multiplies by 8 instead of dividing by 0.08.
16. B. The lesser limit controls. Averaging (C) or taking the larger (A) would exceed the lender's DSCR requirement.
17. C. Money pooled in an enterprise with profits expected from another's efforts is commonly a security under federal and state law. Written documents and legal advice come before any money changes hands.
18. D. Payback $\$140{,}000 \div \$10{,}000 = 14$ years; cash-on-cash $\$10{,}000 \div \$140{,}000 \approx 7.1\%$.
19. D. The statute requires at least two ADUs per lot in those zones and forbids owner-occupancy requirements; it still lets jurisdictions restrict ADUs used as short-term rentals (so C is wrong).
20. A. $\$14{,}320 - \$18{,}067 = -\$3{,}747$; DSCR $14{,}320 \div 18{,}067 \approx 0.79$, not 1.26 (D, which inverts the ratio). Borrowing at a cost above the project's yield lowers returns.

PORTFOLIO PIECE: DEAL BINDER — HOUSE HACKING AND SMALL MULTIFAMILY

Assemble this unit's section of your deal binder: the house hack versus renting comparison for a real 2–4 unit listing, with the printed House hack worksheet, your hand check of the net housing cost and the move-out view (5.1); the whole-house versus by-the-room analysis with your city's rental and occupancy rules (5.2); the small multifamily deal file with its unit table, utilities, other income, FHA self-sufficiency check and move-out plan (5.3); the apartment-building valuation with rebuilt expenses, cap-rate sensitivity and loan sizing (5.4); and the ADU lot study with its scaled sketch, cost sources and cash and financed worksheets (5.5).

Close the section with a one-page memo: which of the five properties you analyzed would be the wisest first home for a young adult who wants to start investing, and why — or why none of them would be, and what price or terms would change your answer. Every verdict must cite the numbers that justify it.

LOOK FOR	WHAT IT MEANS
House hack analysis	Net housing cost is computed correctly by hand and matches the worksheet, principal is reported separately from cash cost, and the move-out cash flow and DSCR are stated and interpreted honestly.
Room-rental comparison	Both plans are compared on NOI, not gross rent; owner-paid utilities, vacancy and furniture are included; and the city's licensing and occupancy rules are cited with sources.
Small multifamily file	Every unit's rent is supported by comps, owner-paid utilities and other income are entered correctly, the self-sufficiency ratio is computed for three or four units, and the move-out plan is realistic.
Commercial valuation	Expenses are rebuilt from actual figures, value is computed at the market cap rate and one point higher, and the loan is sized as the lesser of the DSCR and LTV limits.
ADU study	Local rules are quoted accurately, all fees are budgeted with sources, and NOI, payback and cash-on-cash are computed both with cash and with a loan, with negative leverage identified if present.

LOOK FOR	WHAT IT MEANS
Judgment and honesty	Each verdict (buy, negotiate to a stated price, or walk away) follows from the numbers, walking away is chosen when the numbers require it, and every changeable figure is labeled as an example with its source.

5.1 House Hacking: Living for Less While You Learn

OBJECTIVES

- Define house hacking and trace its history from the owner-occupied tenement and two-flat to today's duplex purchase.
- Compute a house hacker's net monthly housing cost the way the House hack worksheet does, and compare it with the market rent of a similar home.
- Separate the cash cost of living in a house hack from the principal paydown, and explain why principal is real but not spendable.
- Describe the owner-occupant loan advantage — FHA, VA and conventional loans on one to four units — and the occupancy promise the borrower signs (as of 2026).
- Run the move-out view and decide, with reasons, whether a house hack would still work as a full rental.

> **Warm-up.** Write down what one person your age might pay each month to rent a modest one-bedroom apartment near you (a guess is fine). Now imagine owning a duplex where the tenant next door pays nearly all of your mortgage. In five minutes, list three things that could make that plan cost more than renting.

WATCH

The Power Of House Hacking

BiggerPockets · 11:15

https://www.youtube.com/watch?v=Qf4PUbqQiL8

> **WHEN TO WATCH**
> Watch after the third core idea. Craig Curelop describes his own house hack with enthusiasm; as you listen, write down every number he gives and mark which ones would change with a different price, rate or rent.

BACKUP VIDEO

Should I Buy A Duplex And Rent The Other Half?

The Ramsey Show Highlights · 6:05

https://www.youtube.com/watch?v=xLUxf_-dcoc

Watch on project day as a counterweight: Dave Ramsey answers a caller's duplex question from the debt-averse side. Write down his conditions and compare them with your own House hack worksheet.

KEY TERMS

house hacking

Buying a home with an owner-occupant loan, living in part of it, and renting the rest so the rents offset the owner's housing cost.

owner-occupant loan

A residential mortgage made on the borrower's promise to live in the property as a principal residence, usually with a lower down payment and rate than an investment loan.

occupancy requirement

The loan condition that the borrower move into the property within a set time and live there as a principal residence for a minimum period, commonly one year.

occupancy fraud

Falsely telling a lender that a property will be the borrower's principal residence in order to obtain owner-occupant terms; a federal crime.

net housing cost

The owner's monthly cost to live in a house hack: principal and interest, mortgage insurance, taxes, insurance and other fixed costs, plus repair and CapEx savings, minus rent collected from the other units.

market rent

The rent a typical tenant would pay for a unit today, measured by rent comparables, not by the current lease or the seller's claim.

principal paydown

The part of each loan payment that reduces the loan balance and builds equity, as distinct from interest.

mortgage insurance

Insurance that protects the lender on low-down-payment loans; FHA calls it a mortgage insurance premium (MIP) and conventional lenders call it private mortgage insurance (PMI).

FHA loan

A mortgage insured by the Federal Housing Administration under Section 203(b), available only to owner-occupants of one- to four-unit homes.

VA loan

A mortgage guaranteed by the Department of Veterans Affairs for eligible service members, veterans and survivors, usable on owner-occupied homes of up to four units.

move-out view

The analysis of a house hack as a full rental after the owner moves out: every unit rented, vacancy and management included.

CORE IDEAS

The story. In 1863 a German-born tailor named Lucas Glockner joined two partners to buy a lot on Orchard Street in lower Manhattan, where each man built a five-story brick tenement. Glockner's building, No. 97, held twenty apartments, four to each of its five floors, above a basement with room for shops. By 1864 he and his family were living in it. He was not a distant landlord counting rent from uptown; he climbed the same stairs as his tenants, heard the same complaints about the yard and paid extra, by the Tenement Museum's account, to have the privies in the back drain into the

city sewer when the law did not yet require it. His tenants' rent paid for the building, and his own family's home came with it. That arrangement — an owner living among the people whose rent carries the mortgage — is the oldest pattern in American small-property investing. Glockner owned No. 97 until 1886, and the building survives today as the Lower East Side Tenement Museum.

How they figured it out. Glockner needed partners and savings to build, because nineteenth-century mortgages were short, expensive and hard to get. The modern house hack became possible when the law made long, low-down-payment loans available to ordinary owner-occupants. The National Housing Act of 1934 created the Federal Housing Administration, and its basic program, Section 203(b), insures mortgages on **one- to four-family** homes the borrower lives in. Ten years later the GI Bill gave veterans guaranteed home loans. Fannie Mae and Freddie Mac, buying loans from lenders, kept the same four-unit line. So the law drew the boundary you will meet all through this unit: up to four units can be financed as your *home*; five or more is a commercial building. Generations of families in two-flats in Chicago, triple-deckers in New England and duplexes everywhere used that boundary exactly as Glockner used his tenement — live in one unit, rent the others, and let the rents carry the house.

The big idea. House hacking means buying a home with an **owner-occupant loan**, living in part of it and renting the rest so that the rents offset your housing cost. The measure of success is your **net housing cost**: everything it costs you to live there each month — principal and interest, mortgage insurance, taxes, insurance, owner-paid utilities and a savings set-aside for repairs and capital expenditures (CapEx) — minus the rent the other units actually bring in after vacancy. You then compare that number with the **market rent** of a similar home, because the honest alternative to house hacking is not living free; it is paying rent. A house hack that costs you $1,465 a month to live in, where a similar place rents for $1,500, saves you $35 a month in cash. That is a small win — and it is the realistic size of many house hacks at today's prices and rates.

The second reason people house hack is **principal paydown**. Part of every mortgage payment reduces the loan balance; in the first year of a $289,500 loan at 6.5% (in this example) about $3,236 goes to principal, or $270 a month. That money is not lost the way rent is; it becomes equity. But count it honestly. You cannot spend principal without selling or borrowing, and selling costs — commonly 6–8% of the price — can

swallow several years of it. Count appreciation even more carefully: it is never promised, and it is not cash flow. The House hack worksheet shows principal on a separate line for exactly this reason, so you see your cash cost and your equity gain side by side and never blur them into one happy number.

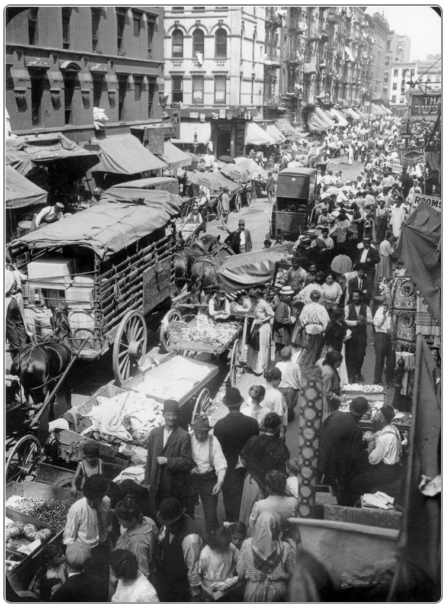
The engine of house hacking is the **owner-occupant loan advantage**. As of 2026, HUD's Handbook 4000.1 lets an FHA borrower with a credit score of 580 or higher finance up to 96.5% of the value (3.5% down) on a one- to four-unit home; VA loans require no down payment as long as the price does not exceed the appraised value; and Fannie Mae (since November 2023) and Freddie Mac (since September 2025) accept as little as 5% down on two- to four-unit principal residences that meet their automated underwriting. An investor buying the same duplex would commonly put 20–25% down at a higher rate. The price of that advantage is a promise. FHA requires at least one borrower to move in within 60 days and intend to live there at least one year; conventional and VA loans carry their own occupancy terms. Signing that promise with no intention of keeping it is **occupancy fraud**, a federal crime, not a clever trick.

House hacking also has costs no spreadsheet shows. You share walls with your tenants, and every clogged drain and noisy evening is yours to answer. You are a landlord before you are twenty-five, so you must learn the law — written screening criteria applied to every applicant, proper notice before entry, a lawful process for every problem. Federal law exempts some owner-occupied buildings of four or fewer units from parts of the Fair Housing Act, but never from its advertising rules, and many states and cities have no such exemption; the safe and right course is to treat every applicant by the same written standard. Choose tenants as you would choose neighbors, because they will be. Keep the relationship friendly and professional: a lease, rent paid through a record, repairs in writing. Finally, plan for the day you leave. Many house hackers move after a year or two and keep the property as a rental — which works only if the numbers work without your rent in them.

Run the numbers. Open the **House hack** worksheet. Enter the price, closing costs, down payment percent, rate and the lender's mortgage insurance figure; the market rent of the unit you will live in; each other unit's market rent from comps; vacancy; and the whole building's taxes, insurance, owner-paid utilities, repairs % and CapEx %. Leave management at your expected rate — it is ignored while you live there and

used in the move-out view. The worksheet returns your monthly cost to live there, the comparison with renting, first-year principal and the move-out cash flow. The classic mistakes: counting your own unit's rent as income while you live in it; leaving repairs and CapEx at zero because "I'll fix things myself" (your labor is free; shingles are not); using the seller's rents instead of comps; forgetting mortgage insurance; and buying a house hack whose move-out view loses hundreds a month, so that you are trapped living there or selling. Print the worksheet and file it in your deal binder with a verdict.

PICTURE STUDY



Hester Street, New York City, Unknown photographer, c. 1903 · Photograph · National Archives and Records Administration, College Park, Maryland

Image: Wikimedia Commons, public domain

This photograph shows Hester Street on Manhattan's Lower East Side around 1903, a block from Orchard Street, where Lucas Glockner built and lived in No. 97. The photographer is unknown; the print survives in the records of a federal housing agency at the National Archives. Nearly every building in the picture was a tenement with shops below and families above, and many were owned by immigrants who had saved, borrowed and bought — often living in their own buildings. It opens the lesson because it shows the world house hacking grew out of: crowded, hardworking streets where renting rooms and flats to neighbors was how ordinary families got a start.

Look closely

- Count the stories of the tenements. Each floor held several apartments, and the rents of all of them paid the owner's mortgage.
- Find the sign that says "ROOMS" on the right. Renting rooms by the week was common, and many families took in boarders to make their own rent.
- Look at the shopfronts at street level. Commercial rent from the ground floor was "other income" that helped the whole building pay.
- Notice how many people are in the street. Demand for housing was enormous — but so were crowding, wear and the landlord's duty to keep

buildings safe.

Talk about it

1. What would it have been like to own one of these buildings and live in it among your tenants? What would be easier, and what would be harder, than owning one far away?
2. Which costs in the House hack worksheet would a landlord on this street have faced, and which might he have forgotten to save for?
3. Lucas Glockner paid for better drainage than the law required. What does it look like today for a landlord to love his neighbor as himself when no rule forces him to?

PROJECT

House Hack or Rent? A Two-Path Comparison

You will find a real small multifamily listing (a duplex, triplex or fourplex) in your area and analyze it as a house hack, then compare it with simply renting a similar apartment. Everything is pretend: you contact no seller, agent or lender. The point is to learn what a house hack really costs, month by month, and whether it would still work the day you move out.

You will need

- A real 2–4 unit listing from a public listing site, with photos and the listed taxes
- Three rent comparables for one of its units, and one listing for a similar apartment you might rent instead
- The School Launch Deal Analyzer (House hack and Rental worksheets) and a printer
- Your deal binder and a calculator

Steps

1. Record the listing: price, units, bedrooms and baths per unit, year built, taxes and anything the listing says about current rents.
2. Estimate each unit's market rent from at least three comps, and note how they compare with the listing's claimed rents.
3. Enter the deal in the House hack worksheet with a 3.5% down payment, a rate you find labeled as a current average on a government or lender-neutral site (write the source and date), $150 a month of mortgage insurance as an example, vacancy 6%, repairs 6% and CapEx 7%.
4. Record your net monthly housing cost, the comparison with renting, first-year principal and the move-out cash flow and DSCR.
5. Recompute the net housing cost by hand from the worksheet's lines and show that it matches.
6. Write the lifestyle costs this particular property would bring (shared walls, yard, parking, laundry, distance to work or school).

7. Print the worksheet and write a one-paragraph verdict — buy, negotiate to a stated price, or walk away — and file both in your deal binder.

INVESTOR'S NOTEBOOK

1. Make flashcards for house hacking, owner-occupant loan, occupancy requirement, occupancy fraud, net housing cost, market rent, principal paydown and move-out view.
2. Draw a two-column table, "Cash cost" and "Equity," and sort every line of the House hack worksheet into the right column; draw principal paydown in the Equity column with an arrow labeled "real but not spendable."
3. Write a trap list titled "House Hack Traps," ending with: MY OWN UNIT IS NOT INCOME WHILE I LIVE IN IT.

KEY FORMULAS

$$\text{Net housing cost} = \text{P\&I} + \text{MI} + \frac{\text{taxes} + \text{insurance}}{12} + \text{HOA} + \text{utilities} + \text{other} + \text{reserves} - \text{rent in}$$

$$\text{Reserves} = \text{all units' market rent} \times (\text{repairs \%} + \text{CapEx \%})$$

$$\text{Rent in} = \text{other units' rent} \times (1 - \text{vacancy \%})$$

$$\text{Monthly saving vs. renting} = \text{market rent of your unit} - \text{net housing cost}$$

$$\text{Monthly P\&I} = L \cdot \frac{r}{1-(1+r)^{-n}}, \quad r = \frac{\text{annual rate}}{12}, \; n = 12 \times \text{years}$$

From history. In 1935 the owner of 97 Orchard Street faced new housing rules that would have required costly fireproofing and other upgrades. Rather than pay for them, he evicted the residents and sealed the apartment floors, keeping only the storefronts in use. The apartments sat closed for more than fifty years, until the founders of the Lower East Side Tenement Museum, organized in 1988, found them nearly as the last tenants had left them — a time capsule created by the cost of compliance.

Example 1. In this example, a duplex sells for $300,000. Each side rents for $1,500 by comps. You buy it with a 3.5%-down owner-occupant loan at 6.5% for 30 years, with $8,000 of closing costs and $140 a month of mortgage insurance. Taxes are $3,000 a year, insurance $1,500, and you pay $140 a month for water, sewer and garbage. Use 6% vacancy, 6% repairs and 7% CapEx. What is your net monthly housing cost, and how does it compare with renting a similar unit? (House hack worksheet.)

Show solution

1. Loan: $\$300{,}000 \times (1 - 0.035) = \$289{,}500$; cash to close $\$10{,}500 + \$8{,}000 = \$18{,}500$. P&I from the formula: $\$1{,}829.84$ a month.
2. Fixed costs: $\dfrac{\$3{,}000 + \$1{,}500}{12} + \$140 = \$515.00$ a month.
3. Repair and CapEx savings on the whole building's rent: $\$3{,}000 \times (0.06 + 0.07) = \$390.00$ a month.
4. Rent in from the other side after vacancy: $\$1{,}500 \times (1 - 0.06) = \$1{,}410.00$ a month.
5. Net housing cost: $\$1{,}829.84 + \$140 + \$515.00 + \$390.00 - \$1{,}410.00 = \$1{,}464.84$. Compared with renting: $\$1{,}500 - \$1{,}464.84 = \$35.16$ a month less.

Answer: About $1,465 a month — only about $35 less than renting a similar unit. The cash saving is small; the larger gain is the roughly $270 a month of first-year principal paydown, and the experience. The House hack worksheet shows the same figures.

Example 2. Same duplex. Compare five years of house hacking with five years of renting a similar unit at $1,500, keeping every monthly number flat for simplicity. The loan balance after 60 payments is $271,003.78. What does each choice cost if the house hacker sells at year 5 for (a) the same $300,000 or (b) $347,782 (3% a year of appreciation), with 8% selling costs?

Show solution

1. Renter: $\$1{,}500 \times 60 = \$90{,}000$.
2. House hacker's cash out: $\$18{,}500 + \$1{,}464.84 \times 60 = \$18{,}500 + \$87{,}890.40 = \$106{,}390.40$.
3. (a) Sale proceeds at the same price: $\$300{,}000 \times (1 - 0.08) - \$271{,}003.78 = \$4{,}996.22$. Net cost: $\$106{,}390.40 - \$4{,}996.22 = \$101{,}394.18$.
4. (b) Sale proceeds with appreciation: $\$347{,}782 \times 0.92 - \$271{,}003.78 \approx \$48{,}955.66$. Net cost: $\$106{,}390.40 - \$48{,}955.66 \approx \$57{,}434.74$.
5. Principal paid over five years: $\$289{,}500 - \$271{,}003.78 = \$18{,}496.22$ — nearly all of it eaten by selling costs in case (a).

Answer: With no appreciation, selling after five years leaves the house hacker about $11,400 behind the renter; with 3% annual appreciation, about $32,600 ahead. Principal paydown is real but small early on, selling costs are large, and appreciation is never promised — so a house hack is best judged as a long hold, not a five-year trade.

Example 3. Same duplex. You move out after two years and rent both sides at $1,500 with 9% management. Using the Rental worksheet conventions, what is the move-out cash flow and DSCR?

Show solution

1. Gross scheduled income: $\$3{,}000 \times 12 = \$36{,}000$; vacancy $6\% = \$2{,}160$; EGI $\$33{,}840$.
2. Operating expenses: taxes $3,000 + insurance $1,500 + utilities $1,680 + repairs $2,160 + CapEx $2,520 + management $0.09 \times \$33{,}840 = \$3{,}045.60$ = $13,905.60.
3. NOI: $\$33{,}840 - \$13{,}905.60 = \$19{,}934.40$. Debt service: $(\$1{,}829.84 + \$140) \times 12 = \$23{,}638.04$.
4. Cash flow: $\$19{,}934.40 - \$23{,}638.04 = -\$3{,}703.64$ a year, or $-\$308.64$ a month. DSCR: $\dfrac{\$19{,}934.40}{\$23{,}638.04} = 0.84$.

Answer: About −$309 a month with a DSCR of 0.84: this duplex works as a home but not as a rental at this price and rate. Before buying, the student either negotiates the price down, finds higher rents by comps, plans to stay longer, or walks away.

PRACTICE

1. Easy What is house hacking, in one sentence?

   Show answer

   Buying a home with an owner-occupant loan, living in part of it and renting the rest so the rents offset your housing cost.

2. Easy Up to how many units can be financed with an FHA owner-occupant loan, and what must the borrower do?

   Show answer

   One to four units. At least one borrower must live in the property as a principal residence — under FHA rules as of 2026, moving in within 60 days and intending to stay at least one year.

3. Easy Why does the House hack worksheet compare your net housing cost with the market rent of your own unit?

Show answer

Because the honest alternative to house hacking is renting a similar home. The saving is the difference between that rent and what it costs you to live in the house hack.

4. Medium In this example, P&I is $1,700, mortgage insurance $130, taxes $2,880 a year, insurance $1,320 a year, owner-paid utilities $100 a month, repairs and CapEx 13% of $2,800 total rent, and the other unit rents for $1,400 with 5% vacancy. Find the net housing cost.

Show answer

Fixed: $(\$2{,}880 + \$1{,}320) \div 12 + \$100 = \$450$. Reserves: $\$2{,}800 \times 0.13 = \$364$. Rent in: $\$1{,}400 \times 0.95 = \$1{,}330$. Net: $\$1{,}700 + \$130 + \$450 + \$364 - \$1{,}330 = \$1{,}314$ a month.

5. Medium In problem 4, a similar unit rents for $1,400. Is the house hack cheaper than renting, and by how much?

Show answer

Yes: $\$1{,}400 - \$1{,}314 = \$86$ a month cheaper in cash, before counting any principal paydown.

6. Medium A friend says, “My tenant pays $1,450 and my mortgage is $1,500, so I live for $50 a month.” What has he left out?

Show answer

Taxes and insurance if they are not in the payment, mortgage insurance, owner-paid utilities, vacancy on the tenant’s rent, and repair and CapEx savings for the whole building. His true net housing cost is almost certainly several hundred dollars higher.

7. Medium In this example, first-year principal paydown is $3,240. A student says the house hack therefore "earns" $270 a month. What is right and wrong about that?

Show answer

Right: about $\$3{,}240 \div 12 = \$270$ a month becomes equity instead of being spent like rent. Wrong: it is not cash, it cannot pay bills, and selling costs of 6–8% can consume years of it if the property is sold soon.

8. Hard A buyer tells a lender she will live in a fourplex, but she plans to rent all four units from the start and keep living with her parents. What is this, and why does it matter?

Show answer

Occupancy fraud — a false statement to obtain owner-occupant loan terms. It is a federal crime, and the lender may call the loan due; the lower down payment and rate exist only because the owner promises to live there.

9. Hard In this example, a duplex's move-out NOI is $19,000 and annual debt service is $22,800. Find the move-out cash flow per month and the DSCR, and say what they mean.

Show answer

$(\$19{,}000 - \$22{,}800) \div 12 \approx -\$316.67$ a month; DSCR $19{,}000 \div 22{,}800 \approx 0.83$. As a full rental it loses money and would not satisfy a lender's typical 1.2–1.25 DSCR; the owner would be trapped living there, feeding it cash, or selling.

10. Hard Why might an owner of a four-unit building who lives in one unit still be bound by fair housing advertising rules even though federal law exempts some small owner-occupied buildings from other parts of the Fair Housing Act?

Show answer

The federal exemption for owner-occupied buildings of four or fewer units never covers the ban on discriminatory notices, statements and advertisements, and many state and local laws have no such exemption. The wise rule is to apply written, lawful screening criteria to every applicant.

11. **Challenge** In this example, a renter pays $1,500 a month for 5 years. A house hacker invests $18,500 up front, pays a net $1,465 a month, and owes $271,000 at year 5 on a duplex bought for $300,000. Ignoring appreciation, what must the duplex sell for, with 8% selling costs, for the two paths to tie?

    Show answer

    The house hacker's cash out is $\$18{,}500 + \$1{,}465 \times 60 = \$106{,}400$; to tie the renter's $90,000 the sale must return $16,400. So $0.92P - \$271{,}000 = \$16{,}400$ gives $P = \$287{,}400 \div 0.92 \approx \$312{,}391$ — about 4.1% above the purchase price.

12. **Challenge** Write three sentences advising a 19-year-old whose house hack saves only $35 a month in cash but whose move-out view loses $300 a month.

    Show answer

    The house hack is a reasonable home but a poor rental: it will only stay affordable as long as you live in it, and moving out will cost about $300 a month. Before buying, try to negotiate the price down, check the rents again with more comps, and decide honestly whether you will stay several years. If the numbers still do not work and you cannot commit to staying, walk away and keep looking — there will be other duplexes.

COMMON MISTAKES

- Counting your own unit's rent as income while you live in it. Only the other units' rent, after vacancy, reduces your housing cost.
- Comparing the house hack with "living free" instead of with the market rent of a similar home. The right question is how much less it costs than renting.
- Treating principal paydown as cash flow. Principal builds equity, but it cannot pay bills, and selling costs can consume years of it.
- Leaving repairs and CapEx at zero because you plan to do the work yourself. Your labor may be free; roofs, water heaters and appliances are not.
- Buying a house hack without running the move-out view. A property that loses money as a full rental can trap you in it.
- Promising a lender you will live in a property you do not intend to occupy. That is occupancy fraud, a federal crime, not a strategy.

Make it a game · Who Pays the Mortgage?. Each player draws a pretend duplex from a deck of index cards (price, rent per side, taxes) made from real listings. Roll one die for the month: 1 means the tenant is late, vacancy for the month; 2 means a $300 repair; 3–6 means a normal month. Each player computes that month's net housing cost with a fixed P&I chart the parent prepared, writes it on a tally sheet and compares it with the market rent on the card. After six rounds, the player whose total cost is furthest below six months of market rent wins — and explains which month hurt most.

Scripture. "Build ye houses, and dwell in them; and plant gardens, and eat the fruit of them;" (Jeremiah 29:5, KJV)

Jeremiah told exiles far from home to settle down, build, live in their houses and make them fruitful rather than wait idly. A house hack is a small, practical way of doing exactly that — dwelling in what you own and making it productive. The same chapter tells them to seek the peace of the city where they lived, a good word for an owner who lives beside the neighbors who rent from him.

5.2 Rent-by-the-Room and the Live-In Flip

OBJECTIVES

- Compare a single-family home rented whole with the same home rented by the room, using net operating income rather than gross rent.
- List the extra costs, risks and legal limits of renting by the room, including occupancy limits and fair housing rules for shared housing.
- Compute a room-by-room house hack in the House hack worksheet and compare it with the student's real housing alternative.
- Explain the live-in flip and apply the Section 121 ownership and use tests to decide whether a home-sale gain may be excluded (education, not tax advice).
- Compute gain on the sale of a live-in flip from amount realized and adjusted basis.

> **Warm-up.** A four-bedroom house rents for $2,400 a month to one family. Each bedroom could rent separately for $850. In five minutes, write the gross rent each way and then list every extra cost or headache you can think of that comes with four separate renters instead of one household.

WATCH

How One Couple Got Rich With the Live-In House Flip

Coach Carson · 15:50

https://www.youtube.com/watch?v=llt0o9thLyk

> **WHEN TO WATCH**
> Watch after the fifth core idea. Chad Carson interviews Mindy and Carl Jensen about years of live-in flips; note how long they lived in each house, what work they did themselves and what they say about living in a construction zone.

BACKUP VIDEO

Renting by the Room - Tips for Real Estate Investing

The Property Pastor · 12:28

https://www.youtube.com/watch?v=EQ7A9aXYZOQ

Watch on project day before you build your room plan. Write down his house rules and tenant criteria, and mark any that you would need to check against your state's fair-housing and landlord–tenant law.

KEY TERMS

rent-by-the-room

Renting individual bedrooms in one dwelling to separate tenants under separate agreements, with shared kitchen, bath or living areas.

occupancy limit

A local code or zoning rule limiting how many people, or how many unrelated adults, may live in one dwelling or bedroom.

live-in flip

Buying a home that needs work, living in it as a principal residence while improving it, and selling it after meeting the tax rules for a home sale.

ownership and use tests

The Section 121 requirements that the seller owned the home and used it as a main home for at least two years each during the five years ending on the date of sale.

adjusted basis

The original cost of a property, including certain purchase costs, plus capital improvements, minus depreciation and certain other reductions.

shared housing

A dwelling in which unrelated occupants share living spaces such as a kitchen or bathroom.

rooming house

A building in which rooms are rented to separate occupants, often regulated by local code as a distinct use requiring a license or permit.

Section 121 exclusion

The federal income tax rule that lets an owner exclude up to $250,000 of gain ($500,000 for most married couples filing jointly) on the sale of a main home that meets the ownership and use tests.

amount realized

The sale price minus selling expenses such as commissions and seller closing costs.

capital improvement

Work that adds value, prolongs the life of a property or adapts it to a new use — such as a new roof or kitchen — and is added to basis rather than deducted as a repair.

reduced exclusion

A partial Section 121 exclusion available to some sellers who fail the two-year tests because of a change in place of employment, health or certain unforeseen circumstances.

CORE IDEAS

The story. In 1757 Benjamin Franklin arrived in London as an agent for the Pennsylvania Assembly and took rooms in a narrow brick house at 36 Craven Street, near the Strand. The house belonged to Margaret Stevenson, a widow who had moved there with her daughter, Polly, and supported herself by letting rooms to lodgers. Franklin rented a bedchamber and a sitting room, received visitors in Mrs. Stevenson's parlor and became so much a part of the household that he wrote to the Stevensons as family. Apart from a two-year return to Philadelphia, he lodged with her until he sailed home in 1775. A widow with a house and a few spare rooms built a steady income — and one of the most famous tenants in history — by renting by the room. The house still stands as the Benjamin Franklin House, the only surviving home of his anywhere.

How they figured it out. Letting rooms was so common in nineteenth-century cities that crowded, unsafe lodging houses became a public worry, and cities answered with rules that still shape room rentals. Today most states and cities adopt model building and property-maintenance codes published by the International Code Council, with local changes. As commonly adopted, they require every bedroom to have at least 70 square feet of floor area and at least 50 square feet per person when more than one sleeps there; an emergency escape window or door in every sleeping room, with a net clear opening of at least 5.7 square feet (5.0 at grade) and a sill no higher than 44 inches; and smoke alarms in and near sleeping rooms. Many cities add rental licenses and limits on unrelated occupants. The live-in flip, the second idea in this lesson, rests on a tax rule instead: since 1997, Section 121 has let an owner who lives in a home for two of the five years before selling it exclude much or all of the gain — a history you will study in Lesson 9.2.

The big idea. Both strategies in this lesson use a single-family house to do more than house one family. **Rent-by-the-room** rents each bedroom to a separate tenant with shared kitchen and living areas; in this example a four-bedroom home that rents

whole for $2,400 rents as four rooms at $850 for $3,400 — 42% more gross rent. The **live-in flip** buys a tired house, makes it a principal residence while the owner improves it, and sells it after meeting the **ownership and use tests**, so that the gain may be excluded under Section 121. The first strategy trades your time for more income; the second trades your comfort and patience for tax-free equity. Neither is passive, and both reward careful numbers more than enthusiasm.

Gross rent is not profit. A room rental commonly brings more turnover (single renters move more), so vacancy is higher; the owner usually pays every utility, internet and often a cleaning service for common areas; furniture must be bought and replaced; repairs rise with more people using one kitchen and one or two bathrooms; and managers who will handle rooms commonly charge more. In this example those costs turn a $1,000-a-month gross advantage into about $32 a month more NOI — before counting the owner's extra hours. Rooms work best near universities, hospitals and employers with steady demand for single renters. Check the law first: many cities define a **rooming house** as a separate use, limit the number of unrelated adults in one dwelling or require a rental license, smoke and carbon-monoxide alarms and egress windows in every sleeping room. An illegal bedroom is a hazard and a liability, not an asset.

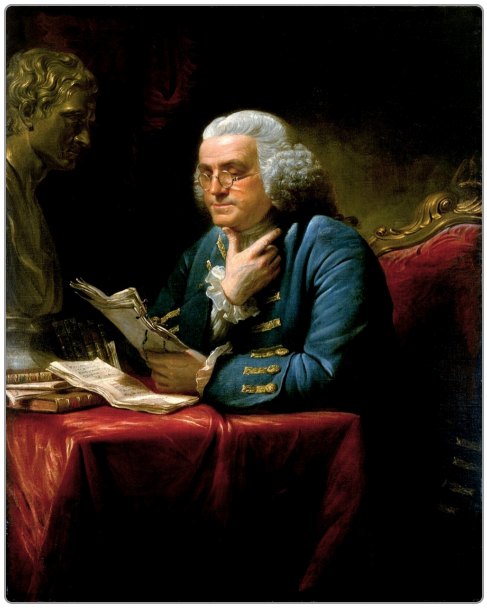
Shared housing raises fair housing and family questions. The federal advertising rules apply to almost every rental; federal guidance has long allowed an ad to state a preference for the sex of a roommate only where living areas such as a bathroom or kitchen are truly shared, and state law may be narrower — so ask your state's fair-housing agency before writing any such ad. Within the law, many owners choose arrangements that respect modesty and safety: renting a floor with its own bathroom to tenants of one sex, keeping a family's children's rooms apart from renters, putting locks on bedroom doors and writing house rules for guests, quiet hours, chores and shared food. A family considering a room rental should talk honestly about privacy, the children's safety and who will enforce the rules. Some families decide the extra income is not worth what they would give up — and that is a sound decision.

The live-in flip rests on the Section 121 tests. You must have **owned** the home for at least two years and **used** it as your main home for at least two years during the five years ending on the sale date (the two years need not be continuous), and you generally may not have excluded gain on another home in the two years before. Gain

is **amount realized** (price minus selling costs) minus **adjusted basis** (purchase price plus certain purchase costs plus **capital improvements**). Sell early and the full exclusion is generally lost, though a **reduced exclusion** may apply to some sellers who move for a new job, health or certain unforeseen events; depreciation taken for any rented portion after May 6, 1997, is not excluded, and periods of rental use can limit the exclusion. Read IRS Publication 523 and ask a tax professional before relying on any of it. The live-in flip's real costs are living in dust and disorder for two years, doing work right with permits, and carrying the mortgage the whole time. A basement apartment or accessory dwelling unit is a third way to make one house do double duty; Lesson 5.5 treats it fully.

Run the numbers. For rooms as a pure rental, use the **Rental** worksheet: enter the total of all room rents as monthly rent, raise vacancy (10% in this example), enter every owner-paid utility and internet under utilities, add cleaning and supplies under other expenses, raise repairs, set management at the rate a room manager would charge, and put furniture into upfront repairs. For a room-by-room house hack, use the **House hack** worksheet: your room's market rent goes in the first rent box and up to three other rooms go in the unit boxes. For a live-in flip, use a spreadsheet: list the price, purchase costs, every capital improvement with receipts, the expected sale price and selling costs, and compute gain. The classic mistakes: comparing gross rents instead of NOI; forgetting that the owner pays the utilities; counting a room that has no legal egress window; selling a live-in flip at 23 months; and treating your own labor as free when it is your evenings for two years.

PICTURE STUDY



Portrait of Benjamin Franklin, David Martin, 1767 · Oil on canvas, mounted on panel · The White House, Washington, D.C.

Image: Wikimedia Commons, public domain

David Martin was a Scottish portrait painter working in London when he painted Benjamin Franklin in 1767 — the same years Franklin was lodging in Margaret Stevenson's house on Craven Street. Martin shows Franklin not as a statesman on a stage but as a working man at a table, reading closely, with a bust of Isaac Newton watching over him. It opens this lesson because it is a portrait of a lodger: one of the most accomplished men of his age lived for about sixteen years in rented rooms in a widow's house, and both of them were better for the arrangement.

Look closely

- Notice where Franklin's eyes are: on the paper, not on us. Martin painted a man absorbed in work — the kind of quiet tenant a householder hopes for.
- Find the bust at the left. It is Isaac Newton, whose science Franklin admired; a rented room can still hold a whole life of thought.
- Look at the red cloth and the carved chair. These were a gentleman's furnishings, but many London lodgers rented furnished rooms with the landlady's own tables and chairs.
- See the spectacles and the hand at his chin. Franklin had grown older in London; long tenancies make landlord and tenant part of each other's lives.

Talk about it

1. What made the arrangement on Craven Street work for both Franklin and Mrs. Stevenson? List three things a landlord and a room renter each must give.
2. Which costs of renting rooms in this lesson would Mrs. Stevenson have faced in 1760, and which are new?
3. Franklin wrote to Mrs. Stevenson and her daughter as family for the rest of his life. How might a landlord who shares a home with renters show hospitality without giving up wise boundaries?

PROJECT

Whole House or By the Room?

You will analyze one real single-family listing with at least four bedrooms two ways — rented whole and rented by the room — and then check what your city allows. The goal is to see the difference between gross rent and NOI, and to learn the local rules before ever counting a room as income.

You will need

- A real 4+ bedroom single-family listing with photos and taxes
- Rent comps for the whole house and room-rent comps from public room-rental listings near you
- Your city or county code on rental licenses, rooming houses and occupancy limits (search the city's website)
- The Deal Analyzer (Rental and House hack worksheets), a calculator and your deal binder

Steps

1. Record the listing and count the bedrooms that appear to have a closet and a window large enough for legal egress (write "unsure" where the photos do not show it).
2. Find three whole-house rent comps and three room-rent comps, and choose a market rent for each plan.
3. Run the Rental worksheet for the whole house with ordinary assumptions.
4. Run it again by the room: total room rent, 10% vacancy, owner-paid utilities and internet, cleaning under other expenses, higher repairs and management, and furniture in upfront repairs.
5. Write both NOIs and cash flows side by side and compute the difference per month.
6. Look up your city's rules: Is a rental license required? Is there a limit on unrelated adults? Is a rooming house a separate use? Record what you find with the web address.

7. Write a one-paragraph verdict for each plan — buy, negotiate to a stated price, or walk away — print both worksheets and file everything in your deal binder.

INVESTOR'S NOTEBOOK

1. Make flashcards for rent-by-the-room, shared housing, occupancy limit, rooming house, live-in flip, Section 121 exclusion, ownership and use tests, amount realized, adjusted basis and capital improvement.
2. Draw a timeline five years long ending on a sale date, shade two separate years of ownership and use, and label it "2 of 5 — need not be continuous."
3. Write a trap list titled "Rooms and Live-In Flips," ending with: GROSS IS NOT NET, AND 23 MONTHS IS NOT TWO YEARS.

KEY FORMULAS

$$\text{NOI} = \text{EGI} - \text{operating expenses}$$

$$\text{Amount realized} = \text{sale price} - \text{selling expenses}$$

$$\text{Adjusted basis} = \text{purchase price} + \text{basis purchase costs} + \text{capital improvements} - \text{depreciation}$$

$$\text{Gain} = \text{amount realized} - \text{adjusted basis}$$

$$\text{Taxable gain (main home)} = \max(0,\ \text{gain} - \text{exclusion}), \quad \text{exclusion} \le \$250{,}000 \text{ or } \$500{,}000$$

From history. Boarding was an ordinary way to live in early America. When Abraham Lincoln served his single term in the U.S. House of Representatives from 1847 to 1849, he did not own or rent a house in Washington; he boarded at Mrs. Ann Sprigg's boarding house on Capitol Hill with other members of Congress, taking his meals at her common table. The site is now occupied by the Library of Congress's Thomas Jefferson Building.

Example 1. In this example, a $350,000 four-bedroom house rents whole for $2,400 a month (6% vacancy, 6% repairs, 7% CapEx, 9% management, taxes $3,400, insurance $1,500, tenant pays utilities). By the room it rents for 4 × $850 = $3,400 a month, but vacancy is 10%, repairs 8%, CapEx 7%, management 12%, the owner pays $350 a month of utilities and internet and $60 a month for common-area cleaning, and furniture costs $6,000 up front. Compare NOI. (Rental worksheet, run twice.)

Show solution

1. Whole house: GSI $28,800; vacancy $1,728; EGI $27,072. Expenses $\$3{,}400 + \$1{,}500 + \$1{,}728 + \$2{,}016 + 0.09 \times \$27{,}072 = \$11{,}080.48$. NOI $\$27{,}072 - \$11{,}080.48 = \$15{,}991.52$.
2. By the room: GSI $40,800; vacancy $4,080; EGI $36,720.
3. Room expenses: taxes $3,400 + insurance $1,500 + utilities $4,200 + repairs $3,264 + CapEx $2,856 + management $0.12 \times \$36{,}720 = \$4{,}406.40$ + cleaning $720 = $20,346.40.
4. Room NOI: $\$36{,}720 - \$20{,}346.40 = \$16{,}373.60$. Difference: $\$16{,}373.60 - \$15{,}991.52 = \$382.08$ a year.

Answer: Gross rent rises 42%, but NOI rises only about $382 a year (about $32 a month) — and the room plan needs $6,000 of furniture and far more of the owner's time. Compare NOI, not gross rent.

Example 2. In this example, you buy a $340,000 four-bedroom house with 3.5% down at 6.5% for 30 years ($8,500 closing costs, $150 a month mortgage insurance), live in one bedroom and rent three at $850 each. Taxes are $3,300, insurance $1,450, and you pay $350 a month of utilities. Use 10% vacancy, 8% repairs and 7% CapEx. Find your net housing cost. (House hack worksheet.)

Show solution

1. Loan $\$340{,}000 \times 0.965 = \$328{,}100$; P&I $\$2{,}073.82$ a month.
2. Fixed: $\dfrac{\$3{,}300 + \$1{,}450}{12} + \$350 = \$745.83$. Reserves: $4 \times \$850 \times 0.15 = \$510.00$.
3. Rent in: $3 \times \$850 \times 0.90 = \$2{,}295.00$.
4. Net: $\$2{,}073.82 + \$150 + \$745.83 + \$510.00 - \$2{,}295.00 = \$1{,}184.65$ a month; first-year principal about $3,667, or $306 a month.

Answer: About $1,185 a month. That is $335 more than renting a room at $850, but about $165 less than renting a $1,350 one-bedroom apartment — so the answer depends on your real alternative. Principal paydown of about $306 a month is equity, not cash.

Example 3. In this example, a single buyer purchases a dated house for $340,000 with $6,000 of purchase costs that are added to basis, lives in it as her main home, and spends $45,000 on capital improvements (roof, kitchen, bath, flooring) over two years. In month 30 she sells for $470,000 with 7% selling costs. What is her gain, and may it be excluded under Section 121? (Education, not tax advice.)

Show solution

1. Amount realized: $\$470{,}000 - 0.07 \times \$470{,}000 = \$470{,}000 - \$32{,}900 = \$437{,}100$.
2. Adjusted basis: $\$340{,}000 + \$6{,}000 + \$45{,}000 = \$391{,}000$.
3. Gain: $\$437{,}100 - \$391{,}000 = \$46{,}100$.
4. Tests: owned 30 months and lived there 30 months within the 5 years before sale — both at least 24 months; no exclusion in the prior 2 years; $\$46{,}100 \leq \$250{,}000$.

Answer: Gain is $46,100, and it may be excluded in full if she meets the tests and no special limits (such as depreciation or rental use) apply. Had she sold at month 18, she would generally not qualify for the full exclusion unless a reduced exclusion applied.

PRACTICE

1. Easy What is the maximum Section 121 exclusion for a single filer, and for most married couples filing jointly?

   Show answer

   $250,000 for a single filer and $500,000 for most married couples filing jointly, if the ownership and use tests are met.

2. Easy Name three costs that usually rise when a house is rented by the room instead of whole.

   Show answer

   Any three of: vacancy and turnover, owner-paid utilities and internet, furniture, cleaning of common areas, repairs and management time or fees.

3. **Easy** What does “2 of 5” mean in the home-sale exclusion?

Show answer

The seller must have owned the home and used it as a main home for at least two years each during the five years ending on the date of sale.

4. **Medium** In this example, five rooms rent for $700 each with 12% vacancy. Find GSI and EGI.

Show answer

GSI $5 \times \$700 \times 12 = \$42{,}000$; vacancy $0.12 \times \$42{,}000 = \$5{,}040$; EGI $\$36{,}960$.

5. **Medium** In this example, a home bought for $280,000 with $4,000 of basis purchase costs had $30,000 of capital improvements. It sells for $360,000 with $25,200 of selling costs. Find the gain.

Show answer

Amount realized $\$360{,}000 - \$25{,}200 = \$334{,}800$; adjusted basis $\$280{,}000 + \$4{,}000 + \$30{,}000 = \$314{,}000$; gain $\$20{,}800$.

6. **Medium** A student plans to rent a basement bedroom that has only a small window near the ceiling. What should he check before counting it as income?

Show answer

Whether the room meets the local code for a sleeping room — especially an egress window or door of the required size — and whether the city requires a rental license or limits occupants. An illegal bedroom is a safety hazard and may not be rented.

7. **Medium** Why might two room renters cost an owner more in repairs than one family renting the whole house?

Show answer

More separate adults share one kitchen and the bathrooms, with less sense of ownership of common areas and more move-ins and move-outs, so wear and turnover repairs rise.

8. Hard In this example, a whole-house NOI is $15,500 and a by-the-room NOI is $16,100, but the room plan needs $7,200 of furniture. How many years of extra NOI pay for the furniture?

Show answer

Extra NOI $\$16{,}100 - \$15{,}500 = \$600$ a year; $\$7{,}200 \div \$600 = 12$ years — longer than the furniture is likely to last, so the room plan does not pay in this example.

9. Hard A married couple filing jointly lived in and owned their home for 3 of the last 5 years and have a $540,000 gain. How much may be excluded and how much is taxable, assuming no special limits?

Show answer

Up to $500,000 may be excluded, leaving $\$540{,}000 - \$500{,}000 = \$40{,}000$ of taxable gain (education, not tax advice).

10. Hard Explain why a seller who owned and lived in a home for 23 months might not get the full Section 121 exclusion, and what might still help.

Show answer

The tests require at least 24 months each of ownership and use in the five years before sale, so 23 months fails. A reduced exclusion may apply if the sale was due to a change in place of employment, health or certain unforeseen circumstances; otherwise, waiting one more month would have mattered.

11. Challenge In this example, a live-in flipper buys for $300,000 (no basis costs), spends $50,000 on improvements and wants a $60,000 gain after 8% selling costs. What sale price does she need?

Show answer

Amount realized must be $\$350{,}000 + \$60{,}000 = \$410{,}000$, so $0.92P = \$410{,}000$ and $P \approx \$445{,}652$.

12. **Challenge** Write three sentences a family might use to decide whether to rent rooms in their own home.

Show answer

We will first check the law — licenses, occupancy limits, smoke alarms and egress — and the true NOI after utilities, vacancy and our time. Then we will talk honestly about privacy, modesty and our children's safety, and write house rules we can keep. If the extra income would cost our family peace, we will say no and look for another way to save.

COMMON MISTAKES

- Comparing gross rents instead of NOI. Room rentals bring more gross rent and much higher expenses.
- Forgetting that the owner usually pays all utilities, internet and common-area cleaning in a room rental.
- Counting a room as a legal bedroom without an egress window, smoke alarm or required permit.
- Writing a room-rental ad that states a preference based on a protected class without checking the narrow shared-housing rules and your state's law.
- Selling a live-in flip before meeting the two-year ownership and use tests, or assuming the exclusion covers depreciation from rented portions.
- Treating your own renovation labor and two years of construction-zone living as free.

> **Make it a game · Gross or Net?.** Make eight cards, each a pretend house with a whole-house rent and a per-room rent (from real listings near you). Make a second deck of "cost" cards: owner pays utilities $300, furniture $6,000, extra vacancy one month, room manager 12%, cleaning $60 a month, egress window needed $4,000. Each round, flip a house and draw three cost cards; players race to say whether the room plan or the whole-house plan earns more per year after those costs. The first correct answer with the arithmetic shown wins the card; most cards after eight rounds wins.

> **Scripture.** “Prepare thy work without, and make it fit for thyself in the field; and afterwards build thine house.” (Proverbs 24:27, KJV)
>
> Solomon puts first things first: prepare the work that produces income, then build the house. A live-in flip and a room rental both tempt us to build the house — the dream kitchen, the higher gross rent — before the field is ready. Check the law, count the true costs and plan the work, and the house will stand on something.

5.3 Duplexes, Triplexes and Fourplexes

OBJECTIVES

- Explain why two- to four-unit buildings sit in the residential lending world and what that means for down payments, appraisals and qualifying (as of 2026).
- Compare a single-family home and a duplex at the same price in the Rental worksheet and explain the difference in cash flow, cap rate and DSCR.
- Apply the FHA self-sufficiency test to a three- or four-unit purchase and find the price at which it would pass.
- Analyze separate versus shared utilities, bill-backs, laundry and parking income, and common-area expenses, and show their effect on NOI.
- Write a move-out plan for a small multifamily house hack.

> **Warm-up.** Look at a photo of any duplex or fourplex for sale near you. In five minutes, count the roofs, furnaces or heat pumps, water heaters, electric meters and kitchens you think it has, and write which of those the owner pays to replace and which the tenants' rent must cover.

WATCH

5 Things to Know Before Buying a Duplex, Triplex, or Quadplex

Real Estate Rookie · 26:57

https://www.youtube.com/watch?v=y04155ctDNY

> **WHEN TO WATCH**
> Watch after the fourth core idea. The hosts answer listeners' questions about small multifamily; list their five things, and for each write the Deal Analyzer input it would change. Skip the closing minutes about first-time-buyer loan choices if time is short — Unit 4 covered them.

BACKUP VIDEO

Single Family vs. Multi Family – Which Should You Invest In?

Coach Carson · 38:54

https://www.youtube.com/watch?v=ixdZv9weqPQ

Watch 15:09–23:50 on project day, where Chad Carson and a guest weigh the advantages and disadvantages of small multifamily against single-family rentals; list each point and mark which ones your deal file's numbers confirm. Continue to 37:54 if time allows for their comparison with larger buildings, a preview of Lesson 5.4.

KEY TERMS

small multifamily

A residential building of two to four dwelling units — a duplex, triplex or fourplex (quadplex) — financed and appraised as residential property.

duplex

A building or lot with two separate dwelling units, side by side or stacked.

self-sufficiency test

The FHA rule for three- and four-unit purchases that the monthly payment (PITI) may not exceed the property's net rental income, figured from fair market rent of all units minus the greater of the appraiser's vacancy and maintenance estimate or 25%.

PITI

The monthly housing payment of principal, interest, property taxes and insurance (for FHA loans including mortgage insurance).

Small Residential Income Property Appraisal Report

The appraisal form (Fannie Mae Form 1025 / Freddie Mac Form 72) used for two- to four-unit properties, combining sales comparison with a rent schedule and gross rent multiplier.

separately metered

Having a separate utility meter for each unit so each tenant pays the utility directly.

master-metered

Having one meter for the whole building, so the owner receives and pays one bill.

utility bill-back

Charging tenants for their share of a master-metered utility under the lease, by submeter or by an allocation formula such as RUBS, where state and local law allow.

RUBS

Ratio utility billing system: an allocation of a building's utility bill among units by a formula such as occupants or square footage.

common area

Space shared by all tenants — halls, stairs, yard, parking, laundry — maintained and often lit and heated at the owner's expense.

other income

Income besides rent, such as laundry, parking, storage or utility bill-backs, entered in the Deal Analyzer as monthly other income.

CORE IDEAS

The story. In 1888 John Mark, a mason in Worcester, Massachusetts, built a three-story brick house at 24 Sigel Street and lived in it. It was a **three-decker** — one apartment stacked on each floor, each with its own front and back porch — and a rare one, because most were built of wood. Between the 1880s and the 1920s Worcester's builders put up thousands of these buildings for the families who worked in its wire mills, steel plants and factories: Swedish and Finnish families near the northern wire works, Italian families as the city grew east. Many were built or bought by tradesmen like Mark, who lived on one floor and rented the other two,

so that two tenant families paid most of the cost of the third family's home. In 1990 the John Mark Three-Decker and dozens of its neighbors were listed on the National Register of Historic Places as examples of the building that housed working New England.

How they figured it out. Lenders and appraisers had to decide how to treat buildings like Mark's — part home, part business. The answer that settled in American lending is that a building of two to four units is still a residence. FHA insures loans on one- to four-unit homes; Fannie Mae and Freddie Mac buy conforming loans on them; and appraisers value them on a special form, the **Small Residential Income Property Appraisal Report** (Fannie Mae Form 1025), which weighs recent sales of similar small multifamily buildings and adds a rent schedule and a **gross rent multiplier**. Lenders who count the rents to help a buyer qualify use a cushion; FHA and Fannie Mae commonly count only 75% of the rent. The line at four units is why a duplex or fourplex can be bought with a home loan by someone who lives there, while a five-unit building cannot.

The big idea. Small multifamily buildings — duplexes, triplexes and fourplexes — give a buyer several incomes under one roof on one lot, with residential financing. That has three advantages. First, vacancy risk is spread out: when one unit of four is empty, the building still collects 75% of its rent, while an empty single-family house collects nothing. Second, there are economies of scale: one roof, one foundation, one lot, one insurance policy and one property tax bill serve several households, so rent per dollar of price is often higher. Third, the owner can live in one unit with an owner-occupant loan. The disadvantages are real too: more tenants mean more turnover and more calls, shared walls mean more noise complaints, buyers for small multifamily are fewer than for houses, and the building is still valued mostly by comparable sales, so you cannot "force" its value up as easily as in a large apartment building.

Utilities deserve careful attention. A building can be **separately metered** (each unit has its own meters and tenants pay their own bills) or **master-metered** (one bill comes to the owner). In many older buildings electricity is separate but water, sewer and garbage come on one bill the owner pays — in this example $420 a month for a fourplex. Separating meters can cost thousands of dollars per unit and is not always possible. Some owners recover part of a master-metered bill through a **utility bill-back** written into the lease, either by submeter or by a formula such as **RUBS**; some

states and cities regulate or forbid this, so check before counting it. Heat matters too: one old boiler serving four units is one big CapEx item and one big bill. Ask for twelve months of actual utility bills, not the seller's estimate.

Small multifamily buildings also have **other income** and **common-area** costs that houses do not. A coin or card laundry room, rented garages or parking spaces and storage lockers can add income; enter it as other income, never as rent. Common areas — halls, stairs, yard, shared lighting, snow removal, the laundry room itself — are the owner's to maintain, light and insure. Fire separation, smoke and carbon-monoxide alarms, and safe exits between units are code requirements, and older conversions may lack them. For FHA buyers of three and four units, the **self-sufficiency test** (as of 2026, in HUD Handbook 4000.1) adds a limit: the monthly PITI may not exceed the net rental income, figured from the appraiser's fair market rent for *all* units, including the one you will live in, minus the greater of the appraiser's vacancy and maintenance estimate or 25%. The same handbook requires three months of PITI in reserves after closing for three- and four-unit FHA purchases.

Plan the move-out before you move in. A small multifamily house hack is often a five- to ten-year home and then a rental. Ask now: What will the units rent for when all of them are rented? Who will manage — you from across town, or a manager at 8–10% of collected rent? Is the building close enough to drive to for repairs? Will the loan allow you to move (most owner-occupant loans require only the initial occupancy period, but read the documents)? Will you keep enough reserves to replace a roof that covers four households? Many young owners of a fourplex discover that it is easiest to stay a few years, pay the loan down, raise rents to market slowly and fairly as leases renew, and buy the next property only when the first one would cash-flow without them. That slow, steady path is the one this course recommends.

Run the numbers. Use the **Rental** worksheet for any 2–4 unit building analyzed as a rental: enter the total rent of all units as monthly rent, laundry, parking, storage and legal bill-backs as other income, owner-paid utilities (from twelve months of bills) under utilities, and common-area costs such as lawn, snow and hall electricity under other expenses. Use a higher CapEx percentage for buildings with several kitchens and baths or one big boiler. Use the **House hack** worksheet if you will live there, and check the FHA self-sufficiency test by hand for three and four units. Remember that the tool takes repairs and CapEx as a percent of gross scheduled income, including

other income, and management as a percent of collected income. The classic mistakes: believing the seller's rent roll without seeing leases and comps; leaving owner-paid water off because "the tenants pay electric"; counting a bill-back your state forbids; and assuming a fourplex is valued by its NOI like an apartment complex, when an appraiser will mostly compare it with other fourplexes' sales.

PICTURE STUDY



Elfreth's Alley, West Portion of North Side (Historic American Buildings Survey, Sheet 2), R. B. MacLeod and S. P. Polk, Historic American Buildings Survey, Measured and drawn 1931; issued 1940 · Measured architectural drawing (ink on paper) · Library of Congress, Prints and Photographs Division, Washington, D.C.

Image: Wikimedia Commons, public domain

The Historic American Buildings Survey, begun in 1933 as a federal work-relief program, sent architects across the country to measure and draw historic buildings so that they would be recorded even if they were lost. This sheet, measured by R. B. MacLeod and S. P. Polk and later issued with the survey, shows Elfreth's Alley in Philadelphia, a narrow street of thirty-two attached houses built between about 1720 and 1836 for tradesmen and their families — shipwrights, silversmiths, glassblowers and furniture makers. It opens this lesson because a row of houses sharing walls teaches the economics of small multifamily at a glance: shared walls, shared lot lines and a shared street mean more homes on less land, at lower cost per family.

Look closely

- Find where each house shares a wall with the next. Shared walls save land and materials — and carry sound and fire, which is why codes require separation between units.
- Count the chimneys. Each meant a fireplace or stove to maintain; today it would mean a furnace, a water heater and a CapEx line for each unit.

- Look at the wide house with two arched openings. Some buildings on the alley had space for a shop or a passage — mixed income under one roof.
- Read the title block. The drawing was made so that the street's measurements would survive; good records outlast owners.

Talk about it

1. Why could more families afford to live on this street than if each had built a detached house on its own lot?
2. If you owned three of these houses side by side, which repairs could you do once for all three, and which must you do three times?
3. Living wall to wall requires patience and courtesy. What habits would make you a good neighbor — and a good landlord — in a building where everyone hears everyone?

PROJECT

The Small Multifamily Deal File

You will analyze one real duplex, triplex or fourplex listing in full, the way a careful small investor would: rents unit by unit, utilities, other income, the move-out plan and, for three and four units, the FHA self-sufficiency test. Purchases are pretend, and you contact no one.

You will need

- A real 2–4 unit listing with photos, taxes and any rent information
- Rent comps for each unit type and, if possible, the local water and sewer rate schedule from the city's website
- The Deal Analyzer (Rental and House hack worksheets), a calculator and a spreadsheet
- Your deal binder

Steps

1. Make a unit table: unit, bedrooms and baths, listed rent, your comp-based market rent and the difference.
2. From the photos and description, decide which utilities are separate and which the owner likely pays; estimate the owner-paid utilities from the city's rate schedule or a stated example, and write your source.
3. List any other income (laundry, garages, parking, storage) and any common-area costs (lawn, snow, hall lighting).
4. Run the Rental worksheet as a full rental and record NOI, cash flow, cap rate, DSCR, GRM and the 1% rule.
5. Run the House hack worksheet as if you lived in the smallest unit, and record your net housing cost.
6. For a triplex or fourplex, compute the FHA self-sufficiency ratio by hand using example loan terms, and find the approximate price at which it would pass.
7. Write a one-paragraph move-out plan and a one-paragraph verdict (buy, negotiate to a stated price, or walk away), print the worksheets and file

everything in your deal binder.

INVESTOR'S NOTEBOOK

1. Make flashcards for small multifamily, self-sufficiency test, PITI, Form 1025, separately metered, master-metered, utility bill-back, RUBS, common area and other income.
2. Draw a fourplex in cross-section and label what is shared (roof, foundation, lot, halls, boiler, water line) and what is separate (kitchens, baths, meters, water heaters); color the owner's CapEx items.
3. Write a trap list titled "Small Multifamily Traps," ending with: A FOURPLEX IS VALUED BY COMPS, NOT BY MY HOPES FOR ITS NOI.

KEY FORMULAS

$$\text{Monthly rent (worksheet)} = \sum \text{units' market rents}$$

$$\text{Net self-sufficiency rental income} = \text{FMR}_{\text{all units}} - \max(\text{appraiser's vacancy and maintenance},\ 0.25 \times \text{FMR}_{\text{all units}})$$

$$\text{Self-sufficiency ratio} = \frac{\text{PITI}}{\text{net self-sufficiency rental income}} \leq 100\%$$

$$\text{DSCR} = \frac{\text{NOI}}{\text{annual debt service}}, \quad \text{Cap rate} = \frac{\text{NOI}}{\text{price}}$$

$$\text{GRM} = \frac{\text{price}}{\text{annual gross rent}}$$

From history. Elfreth's Alley, in today's picture, has been lived in for more than three hundred years; its thirty-two houses date from about 1720 to 1836. Its early residents were tradespeople — shipwrights, silversmiths, pewterers, glassblowers and furniture makers — and in the 1770s about one-third of its households were headed by women. A street of modest attached homes, built close together on a narrow lane, has outlasted many grander houses: well-built small housing that serves working families tends to endure.

Example 1. In this example, two properties each sell for $300,000 and would be bought with 25% down at 7% for 30 years ($6,000 closing). The house rents for $2,000 (taxes $3,000, insurance $1,300, 6% repairs, 7% CapEx). The duplex rents for 2 × $1,350 = $2,700 (taxes $3,000, insurance $1,500, owner-paid water and garbage $150 a month, 7% repairs, 8% CapEx). Both use 6% vacancy and 9% management. Compare them in the Rental worksheet.

Show solution

1. Loan $225,000; P&I $1,496.93; debt service $17,963.17 a year for both.
2. House: EGI $24,000 − $1,440 = $22,560; expenses $3,000 + $1,300 + $1,440 + $1,680 + $2,030.40 = $9,450.40; NOI $13,109.60.
3. Duplex: EGI $32,400 − $1,944 = $30,456; expenses $3,000 + $1,500 + $1,800 + $2,268 + $2,592 + $2,741.04 = $13,901.04; NOI $16,554.96.
4. Cash flow: house ($13,109.60 − $17,963.17) ÷ 12 = −$404.46 a month; duplex ($16,554.96 − $17,963.17) ÷ 12 = −$117.35.
5. Cap rate and DSCR: house 4.37% and 0.73; duplex 5.52% and 0.92.

Answer: Neither cash-flows at this price and rate, but the duplex comes much closer: about $287 a month better, with higher cap rate and DSCR, because two rents share one roof and lot. Holding NOI and terms fixed, the duplex breaks even near a $276,500 price — a negotiating target, or a reason to walk away.

Example 2. In this example, a triplex sells for $480,000 and you plan an FHA loan with 3.5% down at 6.5% for 30 years. Monthly taxes are $450, insurance $200 and mortgage insurance $300. The appraiser's fair market rent is $1,500 for each of the three units, including yours, and the appraiser's vacancy and maintenance estimate is less than 25%. Does it pass the self-sufficiency test? At about what price would it pass, holding the other costs fixed?

Show solution

1. Loan $\$480{,}000 \times 0.965 = \$463{,}200$; P&I $\$2{,}927.74$; PITI $\$2{,}927.74 + \$450 + \$200 + \$300 = \$3{,}877.74$.
2. Net rental income: $3 \times \$1{,}500 = \$4{,}500$ minus 25% gives $\$4{,}500 \times 0.75 = \$3{,}375$.
3. Ratio: $\dfrac{\$3{,}877.74}{\$3{,}375} = 114.9\%$ — over 100%, so it fails.
4. To pass, P&I can be at most $\$3{,}375 - \$950 = \$2{,}425$, a loan of about $\$2{,}425 \div 0.0063207 \approx \$383{,}661$, or a price of about $\$383{,}661 \div 0.965 \approx \$397{,}576$.

Answer: It fails at 114.9%. It would pass near a $397,600 price (a little higher in practice, since taxes and mortgage insurance would also fall) — so at $480,000 an FHA buyer would need higher appraised rents, a different loan or a different building.

Example 3. In this example, a $640,000 fourplex rents for 4 × $1,450 and the owner pays $420 a month of water, sewer and garbage. Financing is 25% down at 7% for 30 years (P&I $3,193.45). Taxes $6,400, insurance $3,200, 5% vacancy, 6% repairs, 7% CapEx, 9% management. The owner adds a lawful lease bill-back that collects $280 a month and a card laundry netting $120 a month. Find NOI, cash flow and DSCR before and after.

Show solution

1. Before: GSI $69,600; EGI $66,120; expenses $\$6{,}400 + \$3{,}200 + \$5{,}040 + \$4{,}176 + \$4{,}872 + \$5{,}950.80 = \$29{,}638.80$; NOI $36,481.20.
2. Debt service $\$3{,}193.45 \times 12 = \$38{,}321.40$. Cash flow $-\$1{,}840.20$ a year ($-\$153.35$ a month); DSCR 0.95.
3. After: other income $400 a month adds $4,800 to GSI. The worksheet subtracts vacancy $240, repairs and CapEx $0.13 \times \$4{,}800 = \$624$ and management $0.09 \times \$4{,}560 = \$410.40$.
4. NOI rises $\$4{,}800 - \$240 - \$624 - \$410.40 = \$3{,}525.60$ to $40,006.80; cash flow $+\$140.45$ a month; DSCR 1.04.

Answer: Recovering part of the utilities and adding laundry turns a $153 monthly loss into a $140 gain — still thin. Count the bill-back only if your state and city allow it and it is in every lease.

PRACTICE

1. Easy What is the largest number of units a building can have and still be financed with a residential owner-occupant loan such as FHA?

   Show answer

   Four. A building of five or more units requires commercial financing.

2. Easy Give two advantages of a duplex over a single-family house at the same price.

   Show answer

   Any two of: two incomes, so one vacancy does not stop all rent; more rent per dollar of price because two units share one roof and lot; the owner can live in one unit with an owner-occupant loan.

3. **Easy** What is the difference between a separately metered and a master-metered building?

Show answer

Separately metered buildings have meters for each unit, and tenants pay their own bills; master-metered buildings have one meter, and the owner receives the bill.

4. **Medium** In this example, a fourplex has three units at $1,200 and one at $1,050, plus $90 a month of laundry. What do you enter as monthly rent and as other income in the Rental worksheet?

Show answer

Monthly rent $3 \times \$1{,}200 + \$1{,}050 = \$4{,}650$; other income $90.

5. **Medium** In this example, a triplex's appraised fair market rents total $4,200 and its PITI is $3,300. Using the 25% factor, does it pass the FHA self-sufficiency test?

Show answer

Net $\$4{,}200 \times 0.75 = \$3{,}150$; ratio $\$3{,}300 \div \$3{,}150 \approx 104.8\%$ — over 100%, so it fails.

6. **Medium** In this example, a duplex sells for $330,000 with total rents of $2,750. Find the GRM and the 1% rule result.

Show answer

GRM $\$330{,}000 \div (\$2{,}750 \times 12) = \$330{,}000 \div \$33{,}000 = 10.0$; 1% rule $\$2{,}750 \div \$330{,}000 \approx 0.83\%$ — it fails the 1% screen.

7. **Medium** A seller's flyer says the tenants pay all utilities. The photos show one water meter and one gas meter. What should you do?

Show answer

Treat the claim as unproven: with one water meter and one gas meter the owner likely pays water and gas. Ask for twelve months of utility bills and the leases, and enter the owner-paid amount under utilities.

8. Hard In this example, adding $250 a month of other income to a duplex at 6% vacancy, 6% repairs, 7% CapEx and 9% management changes NOI by how much in the Deal Analyzer?

Show answer

Annual other income $3,000; less vacancy $180, repairs and CapEx $0.13 \times \$3{,}000 = \$390$ and management $0.09 \times \$2{,}820 = \$253.80$: NOI rises $\$3{,}000 - \$180 - \$390 - \$253.80 = \$2{,}176.20$.

9. Hard Why is a fourplex usually appraised mostly by comparable sales rather than by NOI ÷ cap rate, and why does that matter for an investor who plans to raise its NOI?

Show answer

Two- to four-unit buildings are residential property, bought by owner-occupants and small investors and appraised on Form 1025 mainly by sales of similar buildings. Raising NOI may help, but the appraisal will still lean on what nearby fourplexes sold for, so forced appreciation is limited compared with five-plus-unit buildings.

10. Hard In this example, NOI is $16,554.96 and the loan rate is 7% for 30 years with 25% down. What price makes the annual debt service equal NOI? (Use 0.0066530 as the monthly payment per dollar borrowed.)

Show answer

Monthly P&I allowed $\$16{,}554.96 \div 12 = \$1{,}379.58$; loan $\$1{,}379.58 \div 0.0066530 \approx \$207{,}363$; price $\$207{,}363 \div 0.75 \approx \$276{,}484$.

11. Challenge In this example, a fourplex's FHA PITI would be $4,600. What total appraised fair market rent for all four units is needed to pass the self-sufficiency test using the 25% factor?

Show answer

Net must be at least $4,600, so $0.75 \times \text{FMR} \geq \$4{,}600$ and $\text{FMR} \geq \$6{,}133.33$ — about $1,533 per unit.

12. **Challenge** Write a three-sentence move-out plan for a fourplex house hack that loses $150 a month as a full rental today.

Show answer

I will live in the building at least three years, setting aside every month what management would cost so I know the true numbers. As each lease renews I will move rents gradually toward documented market rents, keep the building in good repair and recover utilities only as the law allows. I will move out only when the Rental worksheet shows positive cash flow and a DSCR of at least 1.2 with management included, and I will keep six months of expenses in reserve.

COMMON MISTAKES

- Believing the seller's rent roll without leases and rent comps. Enter market rent you can prove.
- Ignoring owner-paid water, sewer, garbage or heat because the tenants pay electricity. Check the meters and ask for twelve months of bills.
- Counting a utility bill-back or RUBS charge that your state or city forbids, or that is not written into every lease.
- Forgetting the FHA self-sufficiency test on a triplex or fourplex, or leaving the borrower's own unit out of the fair market rent figure it uses.
- Assuming a two- to four-unit building is valued by NOI ÷ cap rate like a large apartment building. Appraisers lean mostly on comparable sales.
- Entering laundry or parking income as rent instead of other income, or forgetting common-area costs like snow removal and hall lighting.

> **Make it a game · Meter Detective.** A parent prepares ten listing cards for real duplexes, triplexes and fourplexes, each with a photo or description of the meters, heat and laundry. Players race to call out which utilities the owner probably pays and estimate the monthly cost from a printed city rate sheet. Then flip a card with the true answer (the parent decides from the listing details). One point for each utility correctly assigned and one for an estimate within $50. After ten cards, the high scorer picks which building the family would rather own and defends it with the numbers.

> **Scripture.** “Give a portion to seven, and also to eight; for thou knowest not what evil shall be upon the earth.” (Ecclesiastes 11:2, KJV)
>
> The Preacher counsels spreading what we have, because no one knows which trouble will come. A fourplex spreads a building’s income among four households, so one vacancy does not stop all rent — a small, practical picture of that wisdom. It is not a promise of safety: four units under one roof still share one roof, one market and one owner who must keep reserves.

5.4 Five Units and Up: When Multifamily Becomes Commercial

OBJECTIVES

- Explain why buildings of five or more units are financed and valued as commercial property, underwritten mainly on NOI and DSCR.
- Value an apartment building by NOI ÷ cap rate and compute the value created by each added dollar of NOI (forced appreciation).
- Size a commercial loan as the lesser of a DSCR limit and an LTV limit, and describe common commercial loan terms (as examples).
- Build a fuller apartment expense list — common utilities, payroll or contract labor, turnover, legal and accounting — and compute an expense ratio.
- Describe syndications in outline and explain why pooled investments can be securities that require legal compliance.

> **Warm-up.** An eight-unit building earns $49,000 a year after expenses. One buyer says it is worth $700,000; another says $820,000. In five minutes, write what you think could make two careful buyers disagree by $120,000 about the same income — and which number you would rather pay.

WATCH

The Power of Value Add & Cap Rates For Apartments | Fair & Square | Ep. 5

BiggerPockets · 9:01

https://www.youtube.com/watch?v=W1BXsVltYaA

> **WHEN TO WATCH**
> Watch after the third core idea. Matt Faircloth explains value-add and cap rates in a classroom and on a property; write his example of added income and recompute the value change yourself at a 7% cap rate.

BACKUP VIDEO

What's The Better Investment? | 1-4 Units VS 5 Units+

Chandler David Smith · 17:27

https://www.youtube.com/watch?v=GfLl8u1oG3g

Watch on project day. A small investor who owns both sizes compares financing, scale and tenant management; make a two-column chart of his pros and cons and star the ones this lesson's numbers confirm.

KEY TERMS

commercial multifamily

A residential building of five or more units, financed with commercial loans and valued mainly by its income.

capitalization rate

The ratio of a property's NOI to its value or price; the rate at which the market converts income into value.

net operating income (NOI)

Effective gross income minus operating expenses, before debt service, depreciation and income taxes.

forced appreciation

An increase in value created by the owner raising NOI — through higher rents, other income or lower expenses — rather than by market-wide price changes.

debt service coverage ratio (DSCR)

NOI divided by annual debt service; commercial lenders commonly require a minimum such as 1.20–1.25.

loan-to-value (LTV)

The loan amount divided by the property's appraised value or price, whichever the lender uses.

amortization period

The number of years over which loan payments are calculated; a commercial loan may amortize over 25–30 years but come due sooner.

balloon payment

The large remaining loan balance due at the end of a loan term that is shorter than its amortization period.

recourse

A loan term making the borrower personally liable for any shortfall after foreclosure; a non-recourse loan limits the lender, with exceptions, to the property.

expense ratio

Operating expenses divided by gross income; apartments commonly run in the 35–55% range depending on age, utilities and taxes.

syndication

A pooled investment in which a sponsor raises money from passive investors to buy a property; interests in it are commonly securities regulated by federal and state law.

CORE IDEAS

The story. In 1869 Rutherfurd Stuyvesant, a wealthy New Yorker, hired the architect Richard Morris Hunt, who had trained in Paris, to design a five-story building at 142 East 18th Street. Completed in 1870, the Stuyvesant Apartments held suites of rooms on each floor for middle-class families, with shared stairs and a common entrance. New Yorkers of the time associated shared buildings with crowded tenements, and polite society sniffed at the "French flats." But the apartments found tenants, and within a few decades apartment buildings had become an ordinary way for respectable families to live in American cities. Stuyvesant's building — often called the first apartment house in New York built for the middle class — showed something every apartment investor learns: a building of many units is a business,

and it is judged by the income it produces. The Stuyvesant has long since been demolished, but the idea it proved is everywhere.

How they figured it out. Lenders and appraisers settled on valuing larger apartment buildings by their income. An appraiser's **income approach** divides **net operating income** by a **capitalization rate** drawn from recent sales of similar buildings, and commercial lenders size loans by how comfortably NOI covers the payment. In 1988 Fannie Mae announced its Delegated Underwriting and Servicing (DUS) program, which lets approved lenders underwrite loans on apartment properties of five or more units to standard rules — rules built on NOI, the **debt service coverage ratio** and loan-to-value. Banks, life insurance companies and credit unions use similar tests. The result is the bright line you met in Lesson 5.3: four units or fewer is residential, valued mostly by comparable sales and financed on the borrower's income; five or more is commercial, valued mainly by its own NOI and financed mainly on that NOI.

The big idea. A five-plus-unit building is valued as an income stream: $\text{Value} = \text{NOI} \div \text{cap rate}$. That one formula explains both the opportunity and the danger. The opportunity is **forced appreciation**: because value moves with NOI, an owner who raises NOI raises value. At a 7% cap rate (in this example), every $1 of added annual NOI adds about $\$1 \div 0.07 \approx \$14.29$ of value, so $6,500 of added NOI adds about $93,000. The danger is the same formula run backward: lose NOI to vacancy or rising expenses and value falls by the same multiple; and if cap rates in the market rise from 6% to 7% because interest rates rise, the building loses about a seventh of its value with no change in its income. Forced appreciation is real, but it can be undone by forces no owner controls.

Commercial loans differ from home loans. Lenders underwrite mainly the property: they want NOI to cover debt service by a margin — commonly a minimum **DSCR** of 1.20–1.25 — and they cap the loan at a **loan-to-value** limit, commonly 65–80%. The loan is the *lesser* of the two limits. Terms commonly run 5, 7 or 10 years with payments figured over a 25- or 30-year **amortization period**, so a large **balloon payment** is due when the term ends; the owner must refinance or sell then, in whatever market exists. Many commercial loans carry prepayment penalties. Small-balance loans from local banks are commonly **recourse** — the borrower personally guarantees them — while larger agency and conduit loans may be non-recourse with

exceptions. All of these figures vary by lender and year; get a written term sheet and read every page.

Apartment buildings also carry more and different expenses. Besides taxes, insurance, repairs and CapEx, expect owner-paid common utilities (often water, sewer, garbage and hall electricity, sometimes heat), landscaping and snow removal, pest control, turnover costs for cleaning and painting between tenants, advertising, legal and accounting fees, and payroll or contract labor for maintenance. Lenders commonly require replacement reserves per unit each year. Professional management becomes normal; managers commonly charge a percentage of collected rent plus leasing fees, and an owner of twenty units cannot answer every call personally and still keep a job. The **expense ratio** — operating expenses ÷ gross income — for older apartment buildings commonly runs 40–55%, well above the 35–45% many small rentals show. A seller's "pro forma" with a 30% expense ratio is a warning, not a gift.

Many people first meet larger apartments through a **syndication**: a sponsor finds a building, raises money from many passive investors, and manages the deal for fees and a share of profits. Learn one rule now: when people pool money in an enterprise expecting profits from someone else's efforts, the interests they buy are commonly **securities** under federal and state law. Sponsors must register the offering or fit an exemption (federal Regulation D is common), follow rules about whom they may solicit, and tell the truth in every disclosure. Investors must read the documents, understand the fees and the debt, and expect to wait years for their money. This course does not recommend any syndication; Unit 10 returns to partnerships and raising money honestly. Most successful small investors grow into five-plus units after owning several smaller buildings, because they have learned management, built reserves and earned a lender's trust.

Run the numbers. The **Rental** worksheet works for an apartment building: enter the total monthly rent of all units, other income (laundry, parking, bill-backs), the higher vacancy and expense figures from the seller's actual operating statements (trailing twelve months, not the pro forma), and the lender's quoted terms; read NOI, cap rate and DSCR. Then work by hand: value = NOI ÷ market cap rate, maximum loan by DSCR and by LTV, and the value effect of each improvement in NOI. The classic mistakes: valuing a building on its seller's projected NOI instead of its actual NOI; using a cap rate from a different class or neighborhood; forgetting payroll,

turnover and replacement reserves; ignoring the balloon date; and assuming cap rates will stay where they are when you sell. Always compute the value at a cap rate one point higher than today's — and ask whether you could survive it.

PICTURE STUDY



Old Colony Apartments, Seattle, Webster & Stevens, c. 1910 · Photograph (glass-plate negative print) · Museum of History & Industry, Seattle

Image: Wikimedia Commons, public domain

Webster & Stevens was a Seattle commercial photography studio whose photographers recorded the growing city in the early 1900s; much of its work is now held by Seattle's Museum of History & Industry. This picture shows the Old Colony Apartments at 615 Boren Avenue around 1910, when streetcar lines and a booming population were filling Seattle's hills with brick apartment buildings for clerks, teachers and young families. The museum notes that the building still stands much as it appears here. It opens this lesson because it is exactly the kind of property this lesson describes: one building, dozens of households, valued by the income its rents produce.

Look closely

- Count the windows across one floor and estimate how many apartments the building holds. Each unit's rent is part of one NOI.
- Find the columned entrance. A single front door, hall and stairs are common areas the owner must light, clean and insure.
- Notice the automobile at the curb. Within a few years, parking would become an amenity tenants asked for — and sometimes paid for.
- Look at the young street trees and the corner lot. A careful builder chose a location near a streetcar line, where renters wanted to live.

Talk about it

1. Which expenses would the owner of this building pay that the owner of a single house rented to one family would not?
2. If the owner raised every rent by $5 in 1910 and buyers valued the building at a 7% cap rate, how much value would that add per unit of added income? What could make that value disappear?
3. Proverbs tells the owner to know the state of his flocks. How would a good owner of a building this size keep knowing his tenants and his building when he can no longer answer every call himself?

PROJECT

Valuing a Small Apartment Building

You will analyze a real five- to twenty-unit apartment listing as a commercial property: build the NOI from the listing's information and your own expense estimates, value it at a market cap rate, size a commercial loan and test what happens if cap rates rise. As always, the purchase is pretend and you contact no one.

You will need

- A real 5–20 unit listing from a public commercial or residential listing site (many include a rent roll or operating summary)
- The county assessor's record for the property's taxes
- The Deal Analyzer (Rental worksheet), a spreadsheet and a calculator
- Your deal binder

Steps

1. Record the listing: price, units and unit mix, year built, the listed cap rate and NOI, and whether those figures are "actual" or "pro forma."
2. Rebuild the income: rent per unit from the listing or from comps, other income and a vacancy rate you can defend.
3. Rebuild the expenses line by line, including common utilities, turnover, legal and accounting, and management at 8% of collected rent; compute your expense ratio and compare it with the listing's.
4. Run the Rental worksheet with example loan terms (25% down, a rate you label and source) and record NOI, cap rate on price and DSCR.
5. Compute value at the listing's cap rate and at one point higher, and size the largest loan at a 1.25 DSCR and 75% LTV using a 25-year amortization.
6. List three realistic ways to raise NOI that are fair to tenants (for example, moving rents gradually to documented market as leases renew, adding laundry or storage, cutting a wasteful expense), and value each at your cap rate.

7. Print the worksheet and your spreadsheet and write a verdict — buy, negotiate to a stated price, or walk away — for your deal binder.

INVESTOR'S NOTEBOOK

1. Make flashcards for NOI, cap rate, forced appreciation, DSCR, LTV, amortization period, balloon payment, recourse, expense ratio and syndication.
2. Draw the "income ladder": GSI → vacancy → EGI → operating expenses → NOI → ÷ cap rate → value, and beside it NOI → ÷ DSCR → maximum debt service → loan.
3. Write a trap list titled "Commercial Traps," ending with: VALUE = NOI ÷ CAP RATE — AND CAP RATES MOVE.

KEY FORMULAS

$$\text{Value} = \frac{\text{NOI}}{\text{cap rate}}$$

$$\Delta\text{Value} = \frac{\Delta\text{NOI}}{\text{cap rate}}$$

$$\text{Max annual debt service} = \frac{\text{NOI}}{\text{required DSCR}}$$

$$\text{Max loan} = \min\left(\frac{\text{max monthly payment}}{\text{payment per \$1}},\ \text{LTV limit} \times \text{value}\right)$$

$$\text{Expense ratio} = \frac{\text{operating expenses}}{\text{gross scheduled income}}$$

From history. Seattle builder Frederick Anhalt put up about thirty apartment buildings and bungalow courts on Capitol Hill in the late 1920s and early 1930s — many of them handsome brick buildings around landscaped courtyards that still stand. When the Depression came and tenants could not keep up their rent, his income fell below what he needed for insurance and loan interest; by the mid-1930s he had sold his buildings and declared bankruptcy. He lived to 101, long remembered for buildings he no longer owned.

Example 1. In this example, an eight-unit building rents for $1,200 a unit. The owner pays taxes of $14,000, insurance $7,200, common utilities $950 a month and other costs (landscaping, snow, pest control, accounting) $400 a month. Use 5% vacancy, 6% repairs, 6% CapEx and 8% management. Find NOI and value at a 7% cap rate. Then the owner moves rents to the $1,250 market as leases renew and adds a lawful water bill-back of $40 a unit. Find the new NOI and the value created. (Rental worksheet.)

Show solution

1. Before: GSI $8 \times \$1{,}200 \times 12 = \$115{,}200$; vacancy $\$5{,}760$; EGI $\$109{,}440$.
2. Expenses: $\$14{,}000 + \$7{,}200 + \$11{,}400 + \$6{,}912 + \$6{,}912 + \$8{,}755.20 + \$4{,}800 = \$59{,}979.20$ (expense ratio 52%). NOI $\$109{,}440 - \$59{,}979.20 = \$49{,}460.80$; value $\$49{,}460.80 \div 0.07 = \$706{,}582.86$.
3. After: rent $10,000 and other income $320 a month: GSI $123,840; EGI $117,648; expenses $61,672.64; NOI $55,975.36.
4. Added NOI $\$55{,}975.36 - \$49{,}460.80 = \$6{,}514.56$; value $\$55{,}975.36 \div 0.07 = \$799{,}648$; value created $\$6{,}514.56 \div 0.07 \approx \$93{,}065$.

Answer: NOI rises from about $49,461 to $55,975, and at a 7% cap rate value rises by about $93,065 — about $14.29 of value for each $1 of added NOI. The gain depends on the market still paying a 7% cap rate.

Example 2. Using the "before" NOI of $49,460.80 and the $706,583 value, a bank offers a commercial loan at 7% with a 25-year amortization, a minimum DSCR of 1.25 and a maximum LTV of 75%. What is the largest loan? (A 7%, 25-year loan costs about $0.0070678 a month per dollar borrowed.)

Show solution

1. Maximum debt service: $\$49{,}460.80 \div 1.25 = \$39{,}568.64$ a year, or $\$3{,}297.39$ a month.
2. DSCR loan limit: $\$3{,}297.39 \div 0.0070678 \approx \$466{,}537$.
3. LTV loan limit: $0.75 \times \$706{,}583 \approx \$529{,}937$.
4. The loan is the lesser: $\$466{,}537$. Down payment $\$706{,}583 - \$466{,}537 = \$240{,}046$, about 34% of the price.

Answer: About $466,500. The DSCR test, not the LTV limit, controls — which is common when rates are high relative to cap rates — so the buyer needs about 34% down plus closing costs and reserves.

Example 3. The same building's NOI is $49,460.80. Find its value at cap rates of 6%, 7% and 8%. A buyer who pays the 6% value and later must sell at 8%, with the same NOI, loses how much?

Show solution

1. At 6%: $\$49{,}460.80 \div 0.06 = \$824{,}346.67$.
2. At 7%: $\$49{,}460.80 \div 0.07 = \$706{,}582.86$.
3. At 8%: $\$49{,}460.80 \div 0.08 = \$618{,}260.00$.
4. Loss from 6% to 8%: $\$824{,}346.67 - \$618{,}260.00 = \$206{,}086.67$, about 25% of the price.

Answer: $824,347, $706,583 and $618,260. A two-point rise in cap rates erases about $206,000 — a quarter of the value — without a single tenant leaving. Cap-rate risk is why careful buyers underwrite their exit at a higher cap rate than today's.

PRACTICE

1. Easy Why is a six-unit building financed with a commercial loan rather than a home loan?

Show answer

Residential home-loan programs cover one to four units. Five or more units are commercial property, underwritten mainly on the building's NOI and DSCR.

2. Easy In this example, NOI is $84,000 and the market cap rate is 7%. What is the value?

Show answer

$\$84{,}000 \div 0.07 = \$1{,}200{,}000$.

3. Easy What is a balloon payment?

Show answer

The large remaining balance due when a loan's term ends before its amortization period does — for example, a 10-year loan amortized over 25 years.

4. Medium At a 6.5% cap rate, how much value does $1 of added annual NOI create? How much does $4,000 create?

Show answer

$\$1 \div 0.065 \approx \$15.38$; $\$4{,}000 \div 0.065 \approx \$61{,}538$.

5. Medium In this example, a 12-unit building has GSI of $180,000 and operating expenses of $86,400. Find the expense ratio.

Show answer

$\$86{,}400 \div \$180{,}000 = 0.48$, or 48%.

6. Medium In this example, NOI is $60,000 and the lender requires a 1.25 DSCR. What is the maximum annual debt service?

Show answer

$\$60{,}000 \div 1.25 = \$48{,}000$ a year, or $4,000 a month.

7. Medium A seller's flyer shows a 30% expense ratio on a 1960s apartment building with owner-paid water and heat. What should you do?

Show answer

Treat it as a warning. Ask for the trailing twelve months of actual income and expenses, tax bills and utility bills, and rebuild the expenses yourself; older buildings with owner-paid utilities commonly run well above 30%.

8. Hard In this example, NOI is $72,000. The DSCR limit allows $4,800 a month of payments, and a 25-year loan at 7% costs $0.0070678 a month per dollar. The LTV limit is 75% of a $1,028,571 value. Which limit controls, and what is the loan?

Show answer

DSCR limit $\$4{,}800 \div 0.0070678 \approx \$679{,}137$; LTV limit $0.75 \times \$1{,}028{,}571 \approx \$771{,}428$. The lesser, about $679,137, controls.

9. Hard In this example, a building with NOI of $90,000 was bought at a 5.5% cap rate. Five years later NOI is $99,000 but market cap rates are 7%. Compare the values.

Show answer

Purchase value $\$90{,}000 \div 0.055 \approx \$1{,}636{,}364$; later value $\$99{,}000 \div 0.07 \approx \$1{,}414{,}286$. Despite 10% more NOI, the building is worth about $222,078 less.

10. Hard A friend's uncle invites families from church to "each put in $25,000" so he can buy a 40-unit building and share the profits. What legal issue should everyone understand first?

Show answer

Pooled money invested in an enterprise expecting profits from the sponsor's work is commonly a security. The offering must be registered or fit an exemption, with truthful disclosure, and investors need written documents and their own legal advice before anyone sends money.

11. **Challenge** In this example, NOI is $49,460.80 at a 7% cap rate. A water bill-back adds $3,840 of annual other income, but 5% vacancy, 12% repairs and CapEx and 8% management apply to it in the Deal Analyzer. How much value does it create?

    Show answer

    Added NOI $\$3{,}840 - \$192 - \$460.80 - 0.08 \times \$3{,}648 = \$3{,}840 - \$192 - \$460.80 - \$291.84 = \$2{,}895.36$; value $\$2{,}895.36 \div 0.07 \approx \$41{,}362$.

12. **Challenge** Explain in three sentences why most small investors should own several one- to four-unit properties before buying a twenty-unit building.

    Show answer

    A twenty-unit building requires management systems, larger reserves and a lender's confidence in the owner's track record, all of which smaller properties build. Its value depends on NOI and cap rates, so mistakes in expenses or a rise in market cap rates cost far more dollars. Owning smaller buildings first teaches tenant care, repairs and bookkeeping when the mistakes are still small enough to survive.

COMMON MISTAKES

- Valuing a building on the seller's pro forma NOI instead of actual, documented NOI from the trailing twelve months.
- Forgetting that commercial loans are limited by DSCR as well as LTV — and that the lesser limit controls.
- Treating forced appreciation as permanent. A rise in market cap rates or a fall in NOI can erase it.
- Leaving out apartment expenses such as common utilities, turnover, payroll or contract labor, legal, accounting and replacement reserves.
- Ignoring the balloon date on a commercial loan and assuming a refinance will always be available.
- Taking money from friends or family for a pooled real estate deal without understanding securities law.

Make it a game · Cap Rate Auction. A parent writes ten building cards, each with an NOI from a real listing near you (rounded). Each round, the parent rolls a die to set the market cap rate: 1–2 means 6%, 3–4 means 7%, 5–6 means 8%. Players secretly write a bid at or below value (NOI ÷ cap rate); the highest bid not over value wins the building. Then roll again for the "sale" cap rate and score each winner's gain or loss. After ten rounds, the player with the highest total wins — and the family discusses why the most cautious bidder often comes out ahead.

Scripture. "Be thou diligent to know the state of thy flocks, and look well to thy herds. For riches are not for ever: and doth the crown endure to every generation?" (Proverbs 27:23–24, KJV)

A shepherd with a large flock cannot rely on hope; he must count, inspect and know each animal's condition. An apartment owner must know his actual NOI, the state of every roof and boiler and the condition of every unit, because a building's value can fall as fast as it rose. "Riches are not for ever" is the cap-rate lesson in a single line.

5.5 Accessory Dwelling Units and Adding Value with Zoning

OBJECTIVES

- Identify the main types of accessory dwelling units (attached, detached, basement and garage conversions) and the permits and utility connections each requires.
- Summarize, as of 2026, the statewide ADU rules in Washington (RCW 36.70A.681) and Oregon (ORS 197A.425), and explain why the student must still read the local code.
- Compute an ADU's NOI, payback period and cash-on-cash return on the construction cost, with and without borrowing.
- Explain why an ADU may add less appraised value than it costs, and how lenders may count ADU rent (FHA rules as of 2026).
- Describe other zoning value-adds — middle housing, lot splits and conversions — and the risks of counting on rules that vary and change.

> **Warm-up.** Walk (or look on a map) around one block near your home and count garages, backyard cottages and houses with a separate basement door. In five minutes, sketch one lot and draw where a small second home could fit, then write two questions you would have to ask the city before building it.

WATCH

The Beginner's Guide to ADU Investing (Accessory Dwelling Units)

BiggerPockets · 15:34

https://www.youtube.com/watch?v=e_BNaKxoiFM

> **WHEN TO WATCH**
> Watch after the second core idea. Derek Sherrell walks through finding, zoning, financing and building ADUs; list every code item he mentions (setbacks, height, parking, HOA rules) and check each against the Washington and Oregon rules in this lesson.

BACKUP VIDEO

Crash Course on ADU Rental Investing (Accessory Dwelling Unit)

Coach Carson · 35:33

https://www.youtube.com/watch?v=aj-24JvUaDI

Watch 3:00–12:26 on project day for the numbers, cost-saving ideas and how to spot a good ADU lot; then 27:43–34:10 on paying for an ADU. Compare his numbers with your Rental worksheet, and check every zoning claim against your own city's code.

KEY TERMS

accessory dwelling unit (ADU)

A complete, independent living unit with its own kitchen, bath and sleeping space on the same lot as a principal home, attached to it, inside it or detached from it.

attached ADU

An ADU within or attached to the principal home, such as a basement apartment or an addition.

detached ADU (DADU)

An ADU in a separate structure, such as a backyard cottage or a unit over a garage.

conversion

Turning existing space — a garage, basement or attic — into a legal dwelling unit by meeting building, fire and life-safety codes.

owner-occupancy requirement

A local rule requiring the owner of a lot with an ADU to live in the main home or the ADU; prohibited in Washington and Oregon cities covered by state law as of 2026.

connection fee

A utility's charge for connecting a new unit to water or sewer service, sometimes called a system development charge.

lot split

Dividing one parcel into two or more legal lots under local subdivision rules so that each can be built on or sold.

negative leverage

Borrowing at a cost higher than the project's unlevered return, so that the debt lowers rather than raises the owner's return.

impact fee

A one-time charge a city or county imposes on new development to help pay for public facilities; Washington limits ADU impact fees to 50% of those on the principal unit.

middle housing

Duplexes, triplexes, quadplexes, cottage clusters and townhouses built on lots once zoned for one house; Oregon requires many cities to allow them.

payback period

The number of years of NOI needed to recover a project's cost: cost ÷ annual NOI.

CORE IDEAS

The story. For most of the twentieth century, a Seattle homeowner who wanted to build a small cottage in the backyard for a parent, a grown child or a renter was not allowed to. City planners note that such units were commonly allowed in the early 1900s and then were zoned out as single-family rules spread. In 1994 Seattle began allowing attached accessory units — basement and in-law apartments — in single-family zones. In 2006 it allowed detached "backyard cottages" in southeast Seattle as a trial, and by 2010 it allowed them citywide, but the rules still required the owner to live on the lot and limited each lot to one extra unit. In 2019 the city council removed the owner-occupancy requirement, dropped the off-street parking requirement and

allowed two ADUs on one lot. In 2022 the city permitted 988 ADUs, the most in its history and about four times the number in 2018.

How they figured it out. The Northwest's state legislatures took up the same question. Oregon now requires every city of more than 2,500 people and every county of more than 15,000 to allow at least one ADU for each detached single-unit dwelling in areas zoned for detached homes inside an urban growth boundary, and forbids those local governments to impose owner-occupancy or extra off-street parking requirements as "siting and design" rules (ORS 197A.425, as of 2026). In 2023 Washington passed a law, now RCW 36.70A.681, requiring its fully planning cities and counties to allow at least two ADUs on every lot that allows a single-family home inside an urban growth area, beginning six months after each jurisdiction's next periodic comprehensive-plan update. It forbids owner-occupancy requirements, caps ADU impact fees at 50% of those on the main house and bars a maximum ADU size smaller than 1,000 square feet — while still letting cities restrict ADUs used as short-term rentals.

The big idea. An **accessory dwelling unit** is a complete small home — kitchen, bath and sleeping space — on the same lot as a main house. It may be **attached** (a basement apartment or addition), **detached** (a backyard cottage or apartment over a garage) or a **conversion** of existing space. For an investor or a family, an ADU can add rent, house a relative or turn a house hack into a two-income property on one lot. It is also a construction project, judged like any other: what will it cost, what will it rent for, what will it add to value, and how long until it pays for itself? The **payback period** — cost ÷ annual NOI — and the **cash-on-cash return** on the construction cost answer most of those questions in a single line.

Costs vary enormously by type. A basement conversion where the space already has height, light and plumbing may cost a fraction of a new detached cottage, which needs a foundation, a roof, its own utility connections and every finish. Expect design and permit fees, a survey, possible **impact fees** and water and sewer **connection fees**, and sometimes a sewer line upgrade or a new electrical service. Every sleeping room needs legal egress, and the unit needs fire separation, smoke and carbon-monoxide alarms and safe access. Before spending a dollar on drawings, read the city's ADU code and call its permit desk with a parent: setbacks, height limits, lot coverage, tree rules, parking and short-term-rental limits differ from city to city even under the same state law. Homeowner association rules may also apply,

though Washington's law bars association documents created after July 23, 2023, from prohibiting ADUs within urban growth areas.

An ADU does not always add as much appraised value as it costs. Appraisers value one-unit homes with an ADU mostly by comparable sales, and if few nearby sales include ADUs, the appraiser may give only part of the cost as added value — the principle of contribution from Lesson 2.4. Lenders also treat ADU rent cautiously. As of 2026, HUD Handbook 4000.1 lets an FHA lender count 75% of the lesser of the appraiser's fair market rent or the lease as income for a one-unit home with an ADU, and caps ADU rent at 30% of the borrower's total qualifying income. Fannie Mae and other lenders have their own rules; ask before you build if you plan to refinance on the new value. And do the honest math on borrowing: if an ADU earns 8% on its cost and the loan to build it costs 8% or more, the debt makes the project worse, not better — **negative leverage**.

ADUs are one kind of zoning value-add. **Middle housing** laws now allow more than one home on many lots: as of 2026, Oregon requires counties, cities of 25,000 or more and cities of 1,000 or more within the Portland-area Metro region to allow duplexes, triplexes, quadplexes, cottage clusters and townhouses on lots zoned for residential use, and smaller cities of 2,500 or more to allow duplexes; Washington passed its own middle-housing law in 2023. A **lot split** can create a second buildable lot, and some commercial buildings can be converted to apartments. These opportunities are real but slow, expensive and uncertain: rules vary by city, change with each legislative session and are subject to the land itself — slopes, wetlands, trees, sewer capacity. Never pay extra for a lot because of what you hope to build until you have read the code, talked with the permit office and priced the work. And consider the neighbors: a well-built ADU that fits the street is a good neighbor too.

Run the numbers. To analyze an ADU on its own, use the **Rental** worksheet: put the total construction cost (including design, permits and fees) in the purchase price, set the down payment to 100% if paying cash, enter the ADU's market rent from comps, only the *added* property tax and insurance, any owner-paid utilities, low repairs and CapEx for a new unit (5% each in this example) and management if you will hire it. Cash flow then equals NOI, and cash-on-cash equals NOI ÷ cost; payback is cost ÷ NOI. To test borrowing, set the down payment and loan terms the lender would offer and watch the DSCR. For a house hack with an ADU, use the **House hack** worksheet with the ADU as unit 2. The classic mistakes: using the builder's rent estimate

instead of comps; forgetting connection and impact fees; counting appraised value equal to cost; building before checking short-term-rental limits; and borrowing at a rate above the project's yield.

PICTURE STUDY



Elisha and the Shunammite Woman, Gerbrand van den Eeckhout, 1649 · Oil on canvas · National Museum in Warsaw

Image: Wikimedia Commons, public domain

Gerbrand van den Eeckhout was a pupil and lifelong friend of Rembrandt in Amsterdam, and he painted many Bible scenes with Rembrandt's rich light and shadow. This painting shows a moment from 2 Kings 4: a woman of Shunem kneels before the prophet Elisha, while his servant Gehazi comes to push her away. Earlier in the chapter, she and her husband had built "a little chamber" on the wall of their house so that the traveling prophet would have a place to stay — the Bible's best-known accessory dwelling. Her hospitality was answered with the gift of a son, and here she comes to Elisha in grief, trusting him for help. The picture opens this lesson because a small added room can serve purposes far larger than rent.

Look closely

- Find the woman's hands. She has come a long way to hold fast to the prophet she once housed.
- Look at Gehazi behind her. He sees only an interruption; Elisha sees a friend in need.
- Notice the man and the donkey at the right. Travel was slow and hard; a room for a traveler was a real gift.

- Find the book and staff on the ground. Eeckhout fills the scene with the prophet's tools — he was a guest who worked.

Talk about it

1. The Shunammite couple built a chamber with a bed, a table, a stool and a candlestick. What does an ADU need today to be safe and legal, and who decides?
2. What purposes besides rent might a family have for an ADU — a parent, a grown child, a guest? How would those change the numbers?
3. The woman built her chamber for hospitality, not profit. How can an owner who does earn rent from an ADU still practice hospitality toward the person who lives there?

PROJECT

Can This Lot Hold an ADU?

You will choose a real single-family listing (or, with permission, your own family's home) and test whether an ADU could legally and profitably be added. You will read the actual city code, estimate costs from public sources and run the numbers. Do not call a contractor or the city without a parent present; most of this work can be done from the city's website.

You will need

- A real single-family listing or your family's property, with the lot size from the county assessor
- Your city's ADU code and fee schedule (search the city website for "accessory dwelling unit"), and RCW 36.70A.681 or ORS 197A.425 if you live in Washington or Oregon
- ADU rent comps from public listings
- The Deal Analyzer (Rental worksheet), a spreadsheet, graph paper and your deal binder

Steps

1. Record the lot size, house size, zoning and any HOA from the listing and assessor records.
2. From the city code, write the ADU rules: how many ADUs, maximum size, height, setbacks, parking, owner-occupancy (if any) and short-term-rental limits.
3. Sketch the lot to scale on graph paper and draw where an attached or detached ADU could fit within the setbacks.
4. Estimate a cost range for one ADU type using a stated example cost per square foot plus permit, impact and connection fees from the city's fee schedule; label every figure as an estimate and write its source.
5. Estimate the ADU's rent from at least three comps and run the Rental worksheet with the cost as the price and 100% down; record NOI, cash-on-cash and payback.

6. Run it again with a loan the family might use (label the rate as an example) and record the cash flow and DSCR.
7. Write a one-paragraph verdict — build, build only if costs fall to a stated figure, or do not build — print the worksheets and file them in your deal binder.

INVESTOR'S NOTEBOOK

1. Make flashcards for ADU, DADU, attached ADU, conversion, owner-occupancy requirement, impact fee, connection fee, middle housing, lot split, payback period and negative leverage.
2. Draw a lot plan with the house, a detached ADU and the setbacks, and label the utility lines (water, sewer, power) that must reach the new unit.
3. Write a trap list titled "ADU Traps," ending with: COST IS NOT VALUE, AND AN 8% LOAN ON AN 8% PROJECT IS NO GIFT.

KEY FORMULAS

$$\text{Payback period (years)} = \frac{\text{total project cost}}{\text{annual NOI}}$$

$$\text{Cash-on-cash (all cash)} = \frac{\text{NOI}}{\text{total project cost}}$$

$$\text{Cash-on-cash (financed)} = \frac{\text{NOI} - \text{annual debt service}}{\text{cash invested}}$$

$$\text{FHA ADU income} = 0.75 \times \min(\text{appraiser's fair market rent},\ \text{lease rent}),\ \leq 30\% \text{ of total qualifying income}$$

$$\text{Added value (by contribution)} = \text{value with ADU} - \text{value without ADU}$$

From history. Backyard dwellings are not new. In nineteenth-century cities, many large houses had a carriage house behind them, with a stable below and rooms above for a coachman. When automobiles replaced horses, owners turned these buildings into garages and often rented the upstairs rooms as apartments. Many of today's detached ADUs in older neighborhoods began life as those carriage houses — a reminder that zoning, not need, is what came and went.

Example 1. In this example, a detached ADU costs $180,000 to design, permit and build, paid in cash. It rents for $1,700 a month by comps. It adds $1,800 a year of property tax and $500 of insurance, and the owner pays $60 a month of water and sewer for it. Use 5% vacancy, 5% repairs, 5% CapEx and no management. Find NOI, cash-on-cash and payback. (Rental worksheet: price $180,000, 100% down.)

Show solution

1. GSI $\$1{,}700 \times 12 = \$20{,}400$; vacancy $\$1{,}020$; EGI $\$19{,}380$.
2. Expenses: $\$1{,}800 + \$500 + \$720 + \$1{,}020 + \$1{,}020 = \$5{,}060$.
3. NOI $\$19{,}380 - \$5{,}060 = \$14{,}320$; cash-on-cash $\$14{,}320 \div \$180{,}000 = 7.96\%$.
4. Payback $\$180{,}000 \div \$14{,}320 \approx 12.6$ years.

Answer: NOI is $14,320, about an 8% return on the cost, and the ADU pays back its cost in about 12.6 years — a steady but modest investment, before any change in appraised value.

Example 2. Same ADU, but the owner borrows the whole $180,000 at 8% for 20 years. Find the payment, the annual cash flow and the DSCR.

Show solution

1. Monthly payment: $\$180{,}000 \cdot \dfrac{0.08/12}{1-(1+0.08/12)^{-240}} \approx \$1{,}505.59$.
2. Debt service $\$1{,}505.59 \times 12 = \$18{,}067.11$ a year.
3. Cash flow $\$14{,}320 - \$18{,}067.11 = -\$3{,}747.11$ a year, or about $-\$312.26$ a month.
4. DSCR $\$14{,}320 \div \$18{,}067.11 \approx 0.79$.

Answer: The financed ADU loses about $312 a month. Its unlevered return (8%) is about equal to the loan rate, and a 20-year payoff makes the payment larger than the NOI — negative leverage. Borrowing makes sense only if the payment fits the NOI with room to spare.

Example 3. In this example, a basement conversion costs $85,000 and rents for $1,250 (added tax $700, insurance $300, owner-paid utilities $50 a month, 5% vacancy, 5% repairs, 5% CapEx, no management). Find NOI, cash-on-cash and payback. Then, for an FHA buyer whose other income is $5,000 a month, how much ADU rent may count as income (lease and appraised rent both $1,250)?

Show solution

1. GSI $15,000; vacancy $750; EGI $14,250; expenses $\$700 + \$300 + \$600 + \$750 + \$750 = \$3{,}100$.
2. NOI $\$14{,}250 - \$3{,}100 = \$11{,}150$; cash-on-cash $\$11{,}150 \div \$85{,}000 \approx 13.1\%$; payback $\$85{,}000 \div \$11{,}150 \approx 7.6$ years.
3. FHA counts $0.75 \times \$1{,}250 = \$937.50$ a month.
4. Cap check: total qualifying income $\$5{,}000 + \$937.50 = \$5{,}937.50$; 30% of it is $\$1{,}781.25$, and $\$937.50 \leq \$1{,}781.25$.

Answer: NOI $11,150, about 13.1% on cost, with a 7.6-year payback — much better than the new cottage because the shell already existed. An FHA lender could count $937.50 a month of the ADU rent (as of 2026 rules).

PRACTICE

1. Easy What three things make a space a complete accessory dwelling unit?

   Show answer

   Its own kitchen, bathroom and sleeping space, so it can serve as an independent home on the same lot as the main house.

2. Easy As of 2026, may a Washington city covered by RCW 36.70A.681 require the owner to live on a lot with an ADU?

   Show answer

   No. The statute forbids requiring the owner to live in the ADU or another unit on the same lot.

3. Easy In this example, an ADU costs $120,000 and earns $9,600 of NOI a year. Find the payback period.

   Show answer

   $\$120{,}000 \div \$9{,}600 = 12.5$ years.

4. Medium In this example, an ADU rents for $1,400 with 5% vacancy; added taxes are $1,500, insurance $400, owner-paid utilities $50 a month, and repairs and CapEx 5% each. Find NOI.

Show answer

GSI $16,800; EGI $15,960; expenses $\$1{,}500 + \$400 + \$600 + \$840 + \$840 = \$4{,}180$; NOI $11,780.

5. Medium In problem 4, the ADU cost $150,000 in cash. Find cash-on-cash and payback.

Show answer

Cash-on-cash $\$11{,}780 \div \$150{,}000 \approx 7.85\%$; payback $\$150{,}000 \div \$11{,}780 \approx 12.7$ years.

6. Medium An appraiser finds that homes with ADUs sell for about $90,000 more than similar homes without them. The ADU cost $160,000. What added value should you expect, and what principle is this?

Show answer

About $90,000 of added value — the principle of contribution: a feature is worth what it adds, not what it cost. The other $70,000 must be recovered through rent over time.

7. Medium Name three fees or costs beyond construction that an ADU budget should include.

Show answer

Any three of: design or drawings, permit fees, a survey, impact fees, water and sewer connection fees, a sewer line or electrical service upgrade, and utility meter installation.

8. Hard In this example, an FHA borrower has $4,000 a month of other income, and the ADU's lease and appraised rents are both $1,600. How much ADU rent counts, and does it pass the 30% cap?

Show answer

Counted $0.75 \times \$1{,}600 = \$1{,}200$. Total $\$4{,}000 + \$1{,}200 = \$5{,}200$; 30% is $1,560, and $\$1{,}200 \leq \$1{,}560$, so it passes (as of 2026 HUD rules).

9. Hard In this example, an ADU's NOI is $12,000 and it costs $150,000 (8% unlevered). A 15-year loan for the full cost at 7.5% costs $1,390.52 a month. Find the cash flow and explain the result.

Show answer

Debt service $\$1{,}390.52 \times 12 = \$16{,}686.24$; cash flow $\$12{,}000 - \$16{,}686.24 = -\$4{,}686.24$ a year. Even though the rate is below 8%, the short 15-year payoff makes the payment exceed the NOI; the owner is buying equity fast with monthly losses.

10. Hard As of 2026, which Oregon local governments must allow at least one ADU per detached single-unit dwelling, and what two kinds of requirements may they not impose as siting and design rules?

Show answer

Cities of more than 2,500 people and counties of more than 15,000, for areas inside the urban growth boundary zoned for detached homes (ORS 197A.425). They may not impose owner-occupancy requirements or requirements to build additional off-street parking.

11. Challenge In this example, a basement conversion costs $70,000 and adds NOI of $9,800; a detached cottage costs $190,000 and adds NOI of $15,200. Which has the better cash-on-cash and the faster payback, and what else should a family weigh?

Show answer

Basement: $\$9{,}800 \div \$70{,}000 = 14\%$, payback 7.1 years. Cottage: $\$15{,}200 \div \$190{,}000 = 8\%$, payback 12.5 years. The basement wins on both, but the family should also weigh privacy and noise, ceiling height and egress, how much yard is lost, and which unit would best serve a relative if needed.

12. **Challenge** A seller asks $60,000 more than nearby comps because “the lot can be split.” Write three sentences explaining how you would respond.

Show answer

I would not pay for a lot split I have not confirmed: I would read the city’s subdivision and zoning code, check slopes, access, utilities and fees, and estimate the cost and time of the split. Only the value I can prove, minus those costs and the risk that the rules change, belongs in my offer. If the split is truly possible, the seller is free to do it and sell two lots; until then, I pay for the house and lot that exist.

COMMON MISTAKES

- Assuming an ADU adds appraised value equal to its cost. Appraisers apply the principle of contribution, using comparable sales.
- Using the builder’s rent estimate instead of rent comps for similar ADUs.
- Leaving permit, impact and connection fees, surveys and utility upgrades out of the budget.
- Building before reading the local code on setbacks, height, parking, owner occupancy and short-term-rental limits — state law sets minimums, not every rule.
- Borrowing to build at a cost above the ADU’s unlevered return, or with a payment larger than its NOI.
- Paying extra for a lot because of a hoped-for lot split or middle-housing project that has not been checked with the city.

> **Make it a game · Build It or Skip It?.** A parent makes twelve ADU cards: type (basement, garage conversion, backyard cottage), cost, rent, added tax and insurance, and one surprise (sewer upgrade $15,000; city waives impact fee; appraisal adds only half the cost; rent comps $200 higher). Each player draws a card, computes NOI and payback on scratch paper, then flips the surprise and recomputes. Say “build” if payback is 12 years or less, otherwise “skip.” Correct calls with correct math score two points; the highest score after six rounds wins and names the best project.

> **Scripture.** “Let us make a little chamber, I pray thee, on the wall; and let us set for him there a bed, and a table, and a stool, and a candlestick: and it shall be, when he cometh to us, that he shall turn in thither.” (2 Kings 4:10, KJV)
>
> The Shunammite woman saw a need and built a small, complete room for a traveler — bed, table, stool and light. Her chamber was an act of hospitality, and God blessed her house through it. An ADU built today may earn rent, but it can also shelter a parent, a grown child or a neighbor, and the same care for the person who lives there is part of building it well.

UNIT 5

House Hacking and Small Multifamily

In 1863 a tailor named Lucas Glockner built a tenement on Orchard Street and moved his family into it, letting his tenants' rent carry the building. In 1888 a Worcester mason named John Mark built a brick three-decker and lived on one floor. This unit teaches the oldest and most dependable first step in small-property investing: living in part of what you own. You will compute a **house hack**'s true **net housing cost** and compare it honestly with renting; weigh **rent-by-the-room** against renting a house whole and learn how the **live-in flip** uses the home-sale exclusion; analyze **duplexes, triplexes and fourplexes** with their utilities, other income and the FHA **self-sufficiency test**; and see why a building of five or more units becomes a **commercial** property valued by NOI ÷ **cap rate**.

You will finish with **accessory dwelling units** and other ways zoning can add value, using the Washington and Oregon laws as verified examples. Every lesson uses the House hack or Rental worksheet of the Deal Analyzer, and every project ends with a printed worksheet and a verdict in your deal binder. Expect the numbers to be humbling: at today's prices and rates, many house hacks save only a little cash while you live in them and lose money when you move out. Learning to see that before buying — and to negotiate or walk away — is the skill.

PREREQUISITES

- Can compute GSI, vacancy, EGI, operating expenses, NOI, cash flow, cap rate, cash-on-cash and DSCR by the Deal Analyzer's conventions (Unit 3)
- Has run the Rental worksheet on at least three real listings and filed the verdicts in the deal binder
- Can explain the difference between owner-occupant and investment-property loans and what mortgage insurance is (Unit 4)
- Can find and adjust rent comparables for a unit (Lesson 2.3)

MASTERY CHECKLIST

- ☐ I can compute a house hacker's net monthly housing cost line by line and compare it with the market rent of a similar home.
- ☐ I can separate principal paydown from cash cost and explain why selling costs and uncertain appreciation limit its value.
- ☐ I can state the occupancy requirement of owner-occupant loans and explain why occupancy fraud is a crime.
- ☐ I can compare renting a house whole with renting it by the room using NOI, and list the legal and family questions room rentals raise.
- ☐ I can apply the Section 121 ownership and use tests and compute gain from amount realized and adjusted basis for a live-in flip.
- ☐ I can analyze a duplex, triplex or fourplex with owner-paid utilities and other income, and apply the FHA self-sufficiency test.
- ☐ I can value a five-plus-unit building by NOI ÷ cap rate, compute forced appreciation and size a loan by DSCR and LTV.

- ☐ I can compute an ADU's NOI, payback and cash-on-cash with and without a loan, and summarize the Washington and Oregon ADU laws as of 2026.

OPTIONAL BOOKS AND RESOURCES FOR THIS UNIT

- **School Launch Deal Analyzer**: Free. The House hack worksheet computes your net monthly housing cost, first-year principal and the move-out view; the Rental worksheet handles duplexes through apartment buildings and ADUs. Used in every lesson of this unit. Ages 14 and up.
- **Craig Curelop, The House Hacking Strategy (BiggerPockets Publishing)**: A printed book by a young investor who house hacked with rooms and small multifamily; practical on finding, financing and managing a house hack. Read it alongside Lessons 5.1–5.3 and check its numbers in the Deal Analyzer, since rates and prices have changed. Ages 15 and up.
- **HUD: Single Family Housing Policy Handbook 4000.1**: Free, official. The FHA rulebook: occupancy, maximum financing, the three- and four-unit self-sufficiency test, rental income and ADU rules. Search it during Lessons 5.1, 5.3 and 5.5 to confirm any FHA rule as of the current date. Ages 15 and up.
- **CFPB: Buying a House**: Free, official. The Consumer Financial Protection Bureau's step-by-step guide to loan options, Loan Estimates and closing for owner-occupant buyers. Use it with Lesson 5.1 to understand what a first home loan involves. Ages 14 and up.
- **Washington State Legislature: RCW 36.70A.681 (Accessory dwelling units)**: Free, official. The text of Washington's statewide ADU rules — two ADUs per lot in urban growth areas, no owner-occupancy requirement, impact-fee and parking limits. Read it with Lesson 5.5; Oregon students read ORS 197A.425 on the Oregon Legislature's site instead. Ages 15 and up.

Not required. Every project in this unit works without them. School Launch has no ties to these authors, publishers or companies.

LESSONS IN THIS UNIT

5.1	**House Hacking: Living for Less While You Learn**	3 sessions of 50 minutes
5.2	**Rent-by-the-Room and the Live-In Flip**	3 sessions of 50 minutes

5.3 Duplexes, Triplexes and Fourplexes 3 sessions of 50 minutes

5.4 Five Units and Up: When Multifamily Becomes Commercial
3 sessions of 50 minutes

5.5 Accessory Dwelling Units and Adding Value with Zoning 3 sessions of 50 minutes

Unit 5 test

Closed notes, basic calculator. Twenty four-choice questions, 5 points each, 100 points total. Allow about two minutes per question — set a timer for 40 minutes. Show the arithmetic for every calculation question on scratch paper, and choose the one best answer. Aim for 80% or better, and rework every miss. Figures marked “in this example” are examples; real rates, rents, prices, taxes and loan rules vary by place and year.

1. **5 pts**
   In this example, a house hacker’s monthly P&I is $1,600, mortgage insurance $120, taxes and insurance total $4,800 a year, and owner-paid utilities $100 a month. Repairs and CapEx are 13% of the building’s total market rent of $2,600, and the other unit rents for $1,300 with 5% vacancy. What is the net monthly housing cost?
   A. $1,323
   B. $985
   C. $1,658
   D. $1,288

2. **5 pts**
   Under FHA rules as of 2026, what must an owner-occupant borrower do?
   A. Live in the property for at least five years before renting any unit
   B. Live in the property only if it has three or four units
   C. Move in within 60 days and intend to occupy it for at least one year
   D. Occupy it for 30 days, then rent every unit

3. 5 pts

As of 2026, what is the maximum FHA loan-to-value for a purchase by a borrower with a credit score of 580 or higher?

A. 80%

B. 96.5%

C. 100%

D. 75%

4. 5 pts

A buyer tells a lender that a fourplex will be his principal residence so that he can put 3.5% down, though he intends to keep living with his parents and rent all four units. This is:

A. A legal house hack, since he owns the building

B. Allowed if he moves in later

C. A normal practice called the live-in flip

D. Occupancy fraud, a federal crime

5. 5 pts

Which statement about principal paydown in a house hack is most accurate?

A. It is cash flow you can spend each month

B. It builds equity, but it cannot pay bills and selling costs can consume years of it

C. It replaces the need for repair and CapEx savings

D. It is guaranteed to equal the rent you would have paid

6. 5 pts

A four-bedroom house rents whole for $2,400 or by the room for $3,400. What is the right way to compare the two plans?

A. Compare gross rents; the room plan earns $1,000 a month more

B. Compare the number of tenants

C. Compare NOI after the room plan’s higher vacancy, owner-paid utilities, furniture, repairs and management

D. Compare the 1% rule for each plan

7. 5 pts

To exclude gain under Section 121, a seller generally must have:

A. Owned and used the home as a main home for at least two of the five years before the sale

B. Owned the home at least five years in a row

C. Bought another, more expensive home within two years

D. Been at least 55 years old

8. 5 pts

In this example, a live-in flipper bought for $300,000 with $5,000 of basis purchase costs, made $40,000 of capital improvements and sold for $420,000 with 7% selling costs. What is the gain?

A. $75,000

B. $45,600

C. $120,000

D. $90,600

9. 5 pts

In this example, a triplex's FHA PITI would be $3,400 a month and the appraiser's fair market rent for all three units, including the buyer's, totals $4,400. Using the 25% factor, the self-sufficiency test:

A. Passes at 77%

B. Passes, because $4,400 exceeds $3,400

C. Does not apply to triplexes

D. Fails at about 103%

10. 5 pts

In the FHA self-sufficiency test, which rents are used?

A. Only the units the borrower will rent out

B. The seller's current lease rents

C. The appraiser's fair market rent for all units, including the borrower's

D. 75% of the highest rent in the building times the number of units

11. 5 pts

A fourplex has one water meter and one gas meter for the whole building, and each unit has its own electric meter. The owner most likely pays:

A. Water and gas, because they are master-metered

B. Only electricity

C. No utilities, since tenants always pay

D. Every utility, including each unit’s electricity

12. 5 pts

In this example, a duplex adds $200 a month of laundry income. Using the Deal Analyzer with 5% vacancy, 6% repairs, 7% CapEx and 9% management, how much does annual NOI rise?

A. $2,400.00

B. $1,762.80

C. $2,280.00

D. $1,968.00

13. 5 pts

Why is a fourplex usually appraised mainly by comparable sales rather than by NOI ÷ cap rate?

A. Fourplexes have no NOI

B. Federal law forbids the income approach for small buildings

C. Cap rates do not exist below 50 units

D. Two- to four-unit buildings are residential property bought by owner-occupants and small investors, so similar sales are the best evidence

14. 5 pts

In this example, a ten-unit building has NOI of $63,000 and similar buildings sell at a 7% cap rate. What is its indicated value?

A. $441,000

B. $630,000

C. $900,000

D. $1,100,000

15. 5 pts

In this example, an owner raises a building's NOI by $5,600 a year, and the market cap rate is 8%. About how much value is created?

A. $70,000

B. $44,800

C. $5,600

D. $56,000

16. 5 pts

A commercial lender limits a loan to a 1.25 DSCR and a 75% LTV. The DSCR test allows $560,000 and the LTV test allows $600,000. The maximum loan is:

A. $600,000

B. $560,000

C. $580,000

D. $1,160,000

17. 5 pts

A sponsor asks several families to pool $25,000 each to buy an apartment building he will manage, promising a share of profits. What should everyone understand first?

A. Pooled real estate investments are always unregulated

B. Only the bank's approval matters

C. The interests are commonly securities, requiring registration or an exemption and truthful disclosure

D. A handshake agreement is enough among friends

18. 5 pts

In this example, an ADU costs $140,000 in cash and produces NOI of $10,000 a year. What are its payback period and cash-on-cash return?

A. 10 years and 10%

B. 1.4 years and 140%

C. 7 years and 14%

D. 14 years and about 7.1%

19. 5 pts

As of 2026, Washington's RCW 36.70A.681 requires covered cities and counties to:

A. Require owners to live on any lot with an ADU

B. Allow only one ADU per lot

C. Forbid all restrictions on ADUs used as short-term rentals

D. Allow at least two ADUs on lots in urban growth areas that allow single-family homes, without an owner-occupancy requirement

20. 5 pts

In this example, an ADU earns NOI of $14,320 on a $180,000 cost, and the owner borrows the full cost on a loan with $18,067 of annual payments. This is best described as:

A. Negative leverage — the debt turns a positive NOI into a cash loss of about $3,747 a year

B. Forced appreciation

C. Positive leverage, because borrowing always raises returns

D. A 1.26 DSCR

ANSWER KEY

1. A. Fixed costs $\$4{,}800 \div 12 + \$100 = \$500$; reserves $0.13 \times \$2{,}600 = \$338$; rent in $0.95 \times \$1{,}300 = \$1{,}235$; net $\$1{,}600 + \$120 + \$500 + \$338 - \$1{,}235 = \$1{,}323$. B leaves out the repair and CapEx savings.
2. C. HUD Handbook 4000.1 requires at least one borrower to occupy within 60 days of signing and intend to stay at least one year. There is no five-year rule (A), and the requirement applies to every FHA property type.
3. B. HUD's maximum is 96.5% of the adjusted value — a 3.5% down payment. 100% financing (C) is a VA feature when the price does not exceed the appraised value.
4. D. Owner-occupant terms are granted on the promise to live there; lying to obtain them is occupancy fraud. It is not a house hack (A) or a live-in flip (C), both of which require actually living in the property.
5. B. Principal reduces the loan and builds equity, but it is not spendable cash, and 6–8% selling costs can erase several years of it. Treating it as cash flow (A) is the classic mistake.
6. C. Room rentals raise gross rent and expenses together; in the lesson's example a 42% higher gross rent produced only about $382 a year more NOI. Comparing gross (A) misleads.
7. A. The ownership and use tests each require two years within the five ending on the sale date, not necessarily continuous. C and D describe the pre-1997 rules that Section 121 replaced.
8. B. Amount realized $\$420{,}000 - \$29{,}400 = \$390{,}600$; adjusted basis $\$300{,}000 + \$5{,}000 + \$40{,}000 = \$345{,}000$; gain $\$45{,}600$. A forgets the selling costs.
9. D. Net rental income $0.75 \times \$4{,}400 = \$3{,}300$; ratio $\$3{,}400 \div \$3{,}300 \approx 103\%$ — over 100%. B forgets the 25% deduction; the test applies to three- and four-unit properties.
10. C. HUD uses the appraiser's fair market rent from all units, including the one the borrower will occupy, minus the greater of the appraiser's vacancy and maintenance estimate or 25%.
11. A. Master-metered utilities bill to the owner unless a lawful bill-back recovers part of them; separately metered electricity goes to the tenants. Always confirm with twelve months of bills.
12. B. $\$2{,}400 - 0.05 \times \$2{,}400 - 0.13 \times \$2{,}400 - 0.09 \times \$2{,}280 = \$2{,}400 - \$120 - \$312 - \$205.20 = \$1{,}762.80$. A ignores the percentage expenses the tool applies

to other income.

13. D. Small multifamily is appraised on Form 1025, mainly by sales of similar buildings, with a rent schedule and GRM. Forced appreciation through NOI is therefore limited compared with five-plus-unit buildings.
14. C. $\$63{,}000 \div 0.07 = \$900{,}000$. A multiplies instead of dividing.
15. A. $\$5{,}600 \div 0.08 = \$70{,}000$ — \$12.50 of value per \$1 of NOI at an 8% cap rate. B multiplies by 8 instead of dividing by 0.08.
16. B. The lesser limit controls. Averaging (C) or taking the larger (A) would exceed the lender's DSCR requirement.
17. C. Money pooled in an enterprise with profits expected from another's efforts is commonly a security under federal and state law. Written documents and legal advice come before any money changes hands.
18. D. Payback $\$140{,}000 \div \$10{,}000 = 14$ years; cash-on-cash $\$10{,}000 \div \$140{,}000 \approx 7.1\%$.
19. D. The statute requires at least two ADUs per lot in those zones and forbids owner-occupancy requirements; it still lets jurisdictions restrict ADUs used as short-term rentals (so C is wrong).
20. A. $\$14{,}320 - \$18{,}067 = -\$3{,}747$; DSCR $14{,}320 \div 18{,}067 \approx 0.79$, not 1.26 (D, which inverts the ratio). Borrowing at a cost above the project's yield lowers returns.

PORTFOLIO PIECE: DEAL BINDER — HOUSE HACKING AND SMALL MULTIFAMILY

Assemble this unit's section of your deal binder: the house hack versus renting comparison for a real 2–4 unit listing, with the printed House hack worksheet, your hand check of the net housing cost and the move-out view (5.1); the whole-house versus by-the-room analysis with your city's rental and occupancy rules (5.2); the small multifamily deal file with its unit table, utilities, other income, FHA self-sufficiency check and move-out plan (5.3); the apartment-building valuation with rebuilt expenses, cap-rate sensitivity and loan sizing (5.4); and the ADU lot study with its scaled sketch, cost sources and cash and financed worksheets (5.5).

Close the section with a one-page memo: which of the five properties you analyzed would be the wisest first home for a young adult who wants to start investing, and why — or why none of them would be, and what price or terms would change your answer. Every verdict must cite the numbers that justify it.

LOOK FOR	WHAT IT MEANS
House hack analysis	Net housing cost is computed correctly by hand and matches the worksheet, principal is reported separately from cash cost, and the move-out cash flow and DSCR are stated and interpreted honestly.
Room-rental comparison	Both plans are compared on NOI, not gross rent; owner-paid utilities, vacancy and furniture are included; and the city's licensing and occupancy rules are cited with sources.
Small multifamily file	Every unit's rent is supported by comps, owner-paid utilities and other income are entered correctly, the self-sufficiency ratio is computed for three or four units, and the move-out plan is realistic.
Commercial valuation	Expenses are rebuilt from actual figures, value is computed at the market cap rate and one point higher, and the loan is sized as the lesser of the DSCR and LTV limits.
ADU study	Local rules are quoted accurately, all fees are budgeted with sources, and NOI, payback and cash-on-cash are computed both with cash and with a loan, with negative leverage identified if present.

LOOK FOR	WHAT IT MEANS
Judgment and honesty	Each verdict (buy, negotiate to a stated price, or walk away) follows from the numbers, walking away is chosen when the numbers require it, and every changeable figure is labeled as an example with its source.

UNIT 6

BRRRR and Value-Add

Buy, rehab, rent, refinance, repeat: **BRRRR** is the best-known way small investors try to recycle the same cash through property after property. This unit teaches each step as a careful practitioner would. You will find deals on and off the market — through the **MLS**, keyword searches, auctions and honest, kind **off-market outreach** — and check a **wholesaler**'s numbers against your own. You will walk a property with a checklist, write a **scope of work** and build a line-item rehab budget with a **contingency**, including the EPA lead rules for older homes. You will compare bids, write a **draw schedule**, collect **lien waivers** and pay workers promptly and fairly.

Then you will work the **refinance** line by line in the Deal Analyzer's BRRRR worksheet — all-in cost, cash out and **cash left in the deal** — and learn the appraisal, **seasoning** and LTV rules (as of 2026) that decide it. Finally you will ask the hard question in the unit's last lesson: should you repeat? The stories — a bridge built with bad wire, a White House hollowed out, Iowa farmland that lost nearly two-thirds of its value, a developer ruined by debt — all teach one thing: plans that need everything to go right eventually fail. Learn BRRRR's math so well that you can see when not to do it.

PREREQUISITES

- Can compute NOI, cash flow, cash-on-cash and DSCR, and has used the Rental worksheet's stress test (Unit 3)
- Can estimate after-repair value from adjusted sold comparables (Lesson 2.4)
- Can explain hard-money loans, points, cash-out refinances and loan-to-value (Unit 4)
- Has completed the Unit 5 deal binder section, including at least one property analyzed in two worksheets

MASTERY CHECKLIST

- ☐ I can search for value-add listings, screen them with the 70% rule and track a deal funnel with realistic ratios.
- ☐ I can write off-market outreach that is honest, kind and lawful, and check a wholesaler's ARV and rehab figures against my own.
- ☐ I can walk a property with a checklist, write a scope of work by room and system, and price a line-item rehab budget with a contingency.
- ☐ I can decide when the EPA RRP rule applies to work on a pre-1978 home and what it requires.
- ☐ I can compare contractor bids, build a draw schedule tied to inspected work, and explain lien waivers and change orders.
- ☐ I can compute every line of the BRRRR worksheet by hand, including cash out and cash left in the deal, and solve for a full cash-out purchase price.
- ☐ I can explain appraisal, seasoning and LTV rules for refinances (as of 2026) and measure the effect of a low appraisal or a longer hold.
- ☐ I can stress-test a small portfolio of refinanced rentals and write disciplined rules for when to grow, hold or pay down debt.

OPTIONAL BOOKS AND RESOURCES FOR THIS UNIT

- **School Launch Deal Analyzer**: Free. The BRRRR worksheet computes all-in cost, cash in, refinance loan, cash out, cash left in the deal, cash flow, DSCR and the full cash-out target; the Fix & flip and Rental worksheets support Lessons 6.1–6.3. Used in every lesson of this unit. Ages 14 and up.
- **David Greene, Buy, Rehab, Rent, Refinance, Repeat (BiggerPockets Publishing)**: A printed book that walks through each step of the BRRRR method from a practitioner's view. Read it with Lessons 6.4 and 6.5, and check its examples in the BRRRR worksheet with today's rates, since its numbers reflect the years it was written. Ages 15 and up.
- **J Scott, The Book on Estimating Rehab Costs (BiggerPockets Publishing)**: A printed guide to walking a property, writing a scope of work and pricing a rehab line by line. Use it with Lessons 6.2 and 6.3 as a model for your own budget spreadsheet. Ages 15 and up.
- **EPA: Lead Renovation, Repair and Painting Program**: Free, official. The Environmental Protection Agency's explanation of the RRP rule for work that disturbs paint in pre-1978 homes, including what landlords and contractors must do. Read it with Lesson 6.2 before budgeting any work on an older house. Ages 14 and up.
- **Fannie Mae Selling Guide: Cash-Out Refinance Transactions (B2-1.3-03)**: Free, official. The rule page lenders follow for conventional cash-out refinances, including title seasoning, the twelve-month rule for existing mortgages and delayed financing. Use it with Lesson 6.4 and note the page date, since the rules change. Ages 15 and up.

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LESSONS IN THIS UNIT

6.1 Finding Deals: On-Market, Off-Market and Honest Outreach

3 sessions of 50 minutes

6.2	**Scoping and Estimating the Rehab**	3 sessions of 50 minutes
6.3	**Managing Contractors, Permits and the Budget**	3 sessions of 50 minutes
6.4	**The Refinance: Appraisals, Seasoning and Cash Left In**	3 sessions of 50 minutes

Unit 6 test

Closed notes, basic calculator. Twenty four-choice questions, 5 points each, 100 points total. Allow about two minutes per question — set a timer for 40 minutes. Show the arithmetic for every calculation question on scratch paper, and choose the one best answer. Aim for 80% or better, and rework every miss. Figures marked “in this example” are examples; real rates, prices, costs and loan rules vary by place, lender and year.

1. **5 pts**

   In this example, a fixer’s ARV is $250,000 and the rehab will cost $40,000. What is the 70% rule maximum offer?

   A. $175,000

   B. $135,000

   C. $210,000

   D. $147,000

2. **5 pts**

   Which outreach letter follows this course’s honesty standard?

   A. “URGENT: Final notice regarding your property. Respond within 48 hours.”

   B. “Our young family has fallen in love with your house!” — sent by a wholesaler who will assign the contract

   C. A handwritten-looking “note from a neighbor” that is really mass mail

   D. A letter giving the sender’s real name and role as an investor, offering a fair written offer, inviting the owner to seek advice and promising to stop on request

3. 5 pts

As of 2026, Oklahoma's Predatory Real Estate Wholesaler Prohibition Act (effective November 1, 2021) does what?

A. Requires a real estate license to publicly market an equitable interest in a purchase contract

B. Bans all real estate investing by unlicensed persons

C. Requires wholesalers to buy every property they contract

D. Applies only to commercial buildings

4. 5 pts

Which statement about REO properties is most accurate?

A. They are sold by the original owner at full retail price

B. Buyers at REO sales cannot use financing

C. They are lender-owned after foreclosure and usually sold as is, often with addenda that shift risk to the buyer

D. They come with a lender's warranty of condition

5. 5 pts

In this example, an investor wants three purchases a year. About 1 in 8 properties she analyzes earns an offer, and 1 in 10 offers is accepted. How many offers and analyses does she need?

A. 30 offers and 240 analyses

B. 24 offers and 30 analyses

C. 10 offers and 80 analyses

D. 3 offers and 24 analyses

6. 5 pts

In this example, rehab line items total $42,000 and the investor adds a 15% contingency. What is the rehab budget?

A. $42,000

B. $35,700

C. $48,300

D. $57,000

7. 5 pts

A landlord hires a contractor to replace four windows in her 1965 rental. Under the EPA RRP rule:

A. The rule does not apply because windows are small

B. The rule applies only if children live there

C. The rule applies only to homeowners, not landlords

D. The work is covered; she must use a lead-safe certified firm following lead-safe practices

8. 5 pts

Why is a price-per-square-foot estimate not enough for a final rehab budget?

A. It is always too high

B. It cannot see specific big-ticket problems such as a failing roof, sewer line or electrical panel

C. Lenders forbid it

D. It includes too much contingency

9. 5 pts

Which payment plan best protects an owner on a $50,000 rehab contract?

A. 50% at signing and 50% at the end

B. Full payment in cash for a discount

C. A small deposit, then draws for completed and inspected stages, with a final payment after the punch list and final lien waivers

D. Weekly payments regardless of progress

10. 5 pts

An owner paid her general contractor in full, but the contractor did not pay the electrician. Which document, collected with each payment, would have best protected her property from the electrician's claim?

A. A lien waiver from the electrician

B. A certificate of occupancy

C. A change order

D. The building permit

11. 5 pts

In this example, a $200,000 short-term loan at 12% runs two months longer than planned. How much extra interest results?

A. $24,000

B. $2,000

C. $12,000

D. $4,000

12. 5 pts

A change order should be:

A. Agreed by text after the work is done

B. Written, priced and signed by both parties before the changed work begins

C. Avoided by never changing anything, even safety items the inspector requires

D. Paid from the next draw without documentation

13. 5 pts

In this example, a BRRRR's all-in cost is $210,000, the short-term loan is $175,000, the ARV is $250,000, the refinance LTV is 75% and refinance closing is $5,000. How much cash is left in the deal?

A. $27,500

B. $35,000

C. $7,500

D. $22,500

14. 5 pts

In this example, ARV is $280,000, the refinance LTV 75% and refinance closing $6,000. For a full cash-out, the all-in cost may be at most:

A. $210,000

B. $196,000

C. $204,000

D. $216,000

15. 5 pts

As of 2026, Fannie Mae requires which seasoning for a cash-out refinance that pays off an existing first mortgage?

A. None, if the appraisal is high enough

B. At least one borrower on title six months, and the existing first mortgage at least twelve months old

C. Five years of ownership

D. Thirty days on title

16. 5 pts

Before a refinance appraisal, which action by the owner is proper?

A. Telling the appraiser the value needed to make the deal work

B. Promising the appraiser future business for a strong number

C. Calling the appraiser repeatedly after a low value to demand a change

D. Giving the lender a packet with the scope of work, receipts, permits and relevant sold comps

17. 5 pts

In this example, the short-term payoff is $180,000, refinance closing is $5,000, and the appraisal comes in at $230,000 with a 75% LTV. At closing the investor will:

A. Receive $12,500

B. Need to bring about $12,500

C. Receive $172,500

D. Owe nothing

18. 5 pts

In this example, a portfolio worth $600,000 has $450,000 of loans. If values fall 10%, equity changes by:

A. −10%

B. −25%

C. −40%

D. −60%

19. 5 pts

As of 2026, for a borrower with one to four other financed properties, Fannie Mae requires additional reserves equal to:

A. 2% of the total unpaid balance of those loans

B. 6 months of rent

C. 25% of the new loan

D. Nothing

20. 5 pts

Which of these is the clearest sign that a BRRRR investor should stop buying and pay down debt?

A. A new listing has a great kitchen

B. A lender has approved a higher LTV

C. Rents in the area rose 2% last year

D. Reserves have fallen below target and one property has negative cash flow

ANSWER KEY

1. B. $\$250{,}000 \times 0.70 - \$40{,}000 = \$175{,}000 - \$40{,}000 = \$135{,}000$. A forgets to subtract the rehab.
2. D. Honest outreach states who you are, uses no false urgency or disguises, invites independent advice and honors "no." A imitates official notices; B and C deceive.
3. A. The act brought the core of wholesaling — publicly marketing an interest in another's purchase contract — under the license law. It does not ban investing generally (B).
4. C. REO means real estate owned by a lender after foreclosure. Unlike many foreclosure auctions, REO purchases can usually be inspected and financed (so B is wrong), but they are sold as is.
5. A. Offers $3 \div 0.10 = 30$; analyses $30 \times 8 = 240$. D assumes every offer is accepted.
6. C. $\$42{,}000 \times 1.15 = \$48{,}300$. B subtracts the contingency instead of adding it.
7. D. The home was built before 1978, the work is paid, and window replacement is always covered regardless of size; the rule applies to landlords' rentals.
8. B. A shortcut is a screen. In the lesson's example, a $30-per-square-foot estimate missed about $19,600 of roof, exterior and electrical work that a line-item scope found.
9. C. A draw schedule pays only for completed, inspected work and keeps leverage for the punch list. A and B pay far ahead of work done.
10. A. Under state mechanics' lien laws an unpaid sub may claim a lien on the property; a lien waiver from that sub for amounts paid releases the claim.
11. D. $\$200{,}000 \times 0.12 \div 12 \times 2 = \$4{,}000$. A is a full year's interest.
12. B. Written, priced and signed in advance. Required safety work (C) must be done; the point is to document it before doing it.
13. A. Cash in $\$210{,}000 - \$175{,}000 = \$35{,}000$; loan $187,500; cash out $\$187{,}500 - \$175{,}000 - \$5{,}000 = \$7{,}500$; left in $\$35{,}000 - \$7{,}500 = \$27{,}500$. C is the cash out, not the cash left in.
14. C. $\$280{,}000 \times 0.75 - \$6{,}000 = \$210{,}000 - \$6{,}000 = \$204{,}000$. A forgets the closing costs.
15. B. Selling Guide B2-1.3-03 sets both tests. That is why many BRRRR investors refinancing hard-money loans use DSCR or portfolio lenders with different

terms.

16. D. Owners may provide facts; appraiser independence rules forbid pressure, coercion or suggested values. After a low value, the proper step is a reconsideration of value through the lender.
17. B. Loan $\$230{,}000 \times 0.75 = \$172{,}500$; $\$172{,}500 - \$180{,}000 - \$5{,}000 = -\$12{,}500$, so she must bring $12,500 to close.
18. C. Equity before $150,000; after $\$540{,}000 - \$450{,}000 = \$90{,}000$; change $-\$60{,}000 \div \$150{,}000 = -40\%$. Leverage turns a 10% value drop into a 40% equity loss.
19. A. Two percent for one to four financed properties, 4% for five or six, and 6% for seven to ten — minimums that a cautious family often exceeds.
20. D. Shrinking reserves and negative cash flow mean the portfolio cannot absorb a bad year. A higher LTV approval (B) is an invitation to more risk, not a reason to buy.

PORTFOLIO PIECE: DEAL BINDER — BRRRR AND VALUE-ADD

Assemble this unit's section of your deal binder: the deal funnel log with two full worksheets and your parent-reviewed honest outreach letter (6.1); the line-item rehab budget with sources, contingency, RRP and permit notes and its BRRRR or Fix & flip worksheet (6.2); the contractor file — license-lookup notes, contract checklist, draw schedule and budget tracker with delay costs (6.3); the refinance stress test with base and three stress cases (6.4); and the three-property portfolio stress test with your written disciplined BRRRR rules (6.5).

Close the section with a one-page decision memo for the single best property you analyzed in this unit: the price you would pay, the rehab and schedule you would plan for, the refinance you would seek, the cash you expect to leave in the deal and the worst case you tested — or why you would walk away. Every number must trace to a worksheet in the binder.

LOOK FOR	WHAT IT MEANS
Deal funnel and outreach	At least twenty leads are logged with screening math, funnel ratios are computed, and the outreach letter passes every point of the honesty checklist with a parent's review.
Rehab budget	The scope is organized by room and system with quantities, every line is priced as labor plus materials with a source, the contingency is justified, and RRP and permit lines are identified for older homes.
Contractor file	The contract checklist is complete, the draw schedule pays only for inspected work with a final retention, the tracker handles surprises from contingency, and delay costs are carried into the worksheet.
Refinance analysis	All BRRRR worksheet lines are reproduced by hand, the full cash-out price is solved correctly, and low-appraisal, seasoning and rate stress cases are computed and interpreted.
Portfolio stress test and rules	The three properties are stressed together, equity after a value drop and reserve needs are computed, and the written rules include clear conditions for slowing down or paying down debt.

LOOK FOR	WHAT IT MEANS
Judgment and honesty	Verdicts follow from the numbers, walking away is chosen where the math requires it, every changeable figure is labeled with a source and date, and no step depends on deceiving a seller, contractor or appraiser.

6.1 Finding Deals: On-Market, Off-Market and Honest Outreach

OBJECTIVES

- Search the MLS and public listing sites for value-add properties using keywords, days on market and price history.
- Describe the risks of foreclosure auctions and bank-owned (REO) properties and what a buyer gives up when buying “as is.”
- Apply an honesty checklist to off-market outreach — letters, driving for dollars and probate — so that it is truthful, kind and lawful.
- Check a wholesaler’s numbers against your own comps and the 70% rule, and explain why wholesaling is legally restricted in a growing number of states.
- Compute a deal funnel: how many properties to analyze and offers to make to buy one good deal.

> **Warm-up.** Think of an elderly neighbor who has just inherited her late brother’s worn-out house across town. In five minutes, write two letters she might receive from investors — one that would make her feel respected and one that would make her feel tricked. Underline the words that make the difference.

WATCH

Make Your Own Real Estate List: Driving for Dollars Step by Step

BiggerPockets · 18:23

https://www.youtube.com/watch?v=wYEP72lZ2G8

> **WHEN TO WATCH**
> Watch after the fourth core idea. Anson Young explains how to choose an area, spot distressed properties and record addresses. Write his list of property signs; then, as you listen to his marketing advice, test each step against this lesson's honesty checklist and note anything you would do differently.

BACKUP VIDEO

5 Proven Strategies to Find Great Real Estate Investments

Coach Carson · 12:47

https://www.youtube.com/watch?v=PyKhZioe3-I

Watch on project day. A full-time investor describes how he finds deals in his local market; count his strategies, write each as a step in your own deal funnel, and mark which ones a student can practice now using only public information.

KEY TERMS

multiple listing service (MLS)

A database of properties listed for sale by participating brokers, shared so that other brokers can show and sell them.

days on market (DOM)

The number of days a property has been listed; a long DOM or repeated price reductions can signal a motivated seller or a problem property.

off-market property

A property bought or sold without being listed on the MLS, often found through direct outreach or networking.

driving for dollars

Driving or walking a neighborhood to record properties that look vacant or neglected, then researching their owners in public records.

REO (real estate owned)

A property taken back by a lender through foreclosure and held for sale, usually sold as is.

foreclosure auction

A public sale of a property to satisfy a defaulted loan, often requiring cash or certified funds, with no inspection and limited title assurance.

probate

The court-supervised process of settling a deceased person's estate, in which a personal representative may sell real property under the court's and state law's rules.

personal representative

The person appointed to manage a deceased person's estate, also called an executor or administrator.

wholesaler

A person who puts a property under contract and sells the contract, or the property in a quick double closing, to an end buyer for a fee.

assignment of contract

The transfer of a buyer's rights under a purchase contract to another buyer, usually for an assignment fee.

deal funnel

The ratio of properties analyzed to offers made to deals closed; for example, 100 analyses to 10 offers to 1 purchase.

CORE IDEAS

The story. In the late 1800s a Philadelphia minister named Russell Conwell made famous a lecture he called "Acres of Diamonds." It opened with an old tale he had heard while traveling: a Persian farmer named Ali Hafed sold his farm to search the world for diamonds, wandered until he was penniless and died far from home — and the man who bought his farm found diamonds in the stream behind the house. Conwell's point was that opportunity is often closer than we think, among the people and places we already know. He gave the lecture more than six thousand times — 6,152 by his own count — and gave the fees to help working students attend the college he founded in 1884, which became Temple University. For an investor the

lesson is plain: the best deals are usually found by patient people who know one area deeply, not by those always chasing a distant market.

How they figured it out. Finding property for sale was once a matter of signs, newspapers and word of mouth. In the 1880s, real estate brokers in American cities began meeting at "real estate exchanges" to share the properties they had to sell, and according to the National Association of Realtors the first known **multiple listing service** began in San Diego in 1885, delivering updated listings to member brokers. Brokers agreed to share listings and split commissions, so that every buyer's agent could show every listed home. That cooperation built the **MLS** that nearly every on-market deal passes through today. Investors still use it more than any other source; off-market methods — letters, driving neighborhoods, networking — grew up beside it for the properties whose owners never call a broker.

The big idea. A deal is a property you can buy for a price that works by your numbers, and it can come from anywhere. **On-market** deals come through the MLS and public listing sites: properties described with keywords like "handyman special," "as is," "needs TLC," "estate sale" or "cash only"; listings with a long **days on market** or several price reductions; and homes whose photos show what a careful rehab could fix. An investor-friendly agent who will run comps and send you new listings quickly is the most valuable partner most small investors have. **Off-market** deals come from owners who have not listed — reached by letters, by driving for dollars, through probate records or by being known in your community as an honest buyer. Either way, finding deals is a numbers game: you will analyze many properties, offer on a few and buy fewer still.

Auctions and bank-owned properties can be bargains and traps at once. At a **foreclosure auction**, buyers commonly must pay cash or certified funds the same day, cannot inspect the inside, may inherit occupants and some liens, and receive limited title assurance; rules differ by state and by whether the foreclosure is judicial or nonjudicial. **REO** properties, owned by lenders after foreclosure, can be inspected and bought with financing, but are sold as is with bank addenda that shift risk to the buyer. Tax-lien and tax-deed sales have their own state laws and redemption periods. A beginner should watch and study these markets long before bidding in one. Whatever the source, run your own comps: an auction price is not a bargain if the house needs a foundation.

Off-market outreach reaches people, often in hard seasons — an inheritance, a divorce, a job loss, an aging owner who can no longer keep up a house. Do it honestly and kindly. Say clearly who you are and that you are an investor; never pretend to be a family looking for a home if you plan to resell the contract. Use no fake urgency, no official-looking envelopes, no handwritten-looking "notes from a neighbor" that are really mass mail. Make a fair offer, explain it in writing, encourage the owner to talk with family, an agent or an attorney, and accept "no" graciously and permanently — remove anyone who asks from your list. Follow federal and state do-not-call and texting rules. For **probate** properties, address the **personal representative** with sympathy, expect court and estate rules, and be patient. The investor who treats grieving and struggling people well builds a reputation that brings deals for decades.

Wholesalers put properties under contract and sell the contract, by an **assignment of contract**, or the property in a quick double closing to an end buyer for a fee. Some are honest, but many advertise inflated after-repair values and low rehab estimates. Verify every number: pull your own sold comps, estimate the rehab yourself, and check the price against the 70% rule. Wholesaling is also increasingly regulated. Oklahoma's Predatory Real Estate Wholesaler Prohibition Act, effective November 1, 2021, requires a real estate license to publicly market an equitable interest in another person's purchase contract, and a growing number of states require a license, written disclosures or seller cancellation rights. Check your state before you deal with, or ever become, a wholesaler. Finally, count the funnel honestly — in this example, 100 properties analyzed, 10 offers, 1 purchase — and plan your time accordingly.

Run the numbers. Every lead, from any source, goes through the same process: comps for rent and after-repair value, a rehab estimate, and the right Deal Analyzer worksheet — **Rental** for a turnkey buy, **BRRRR** for a value-add rental, **Fix & flip** for a resale. Use the 70% rule (ARV × 70% − rehab) as a quick screen for value-add properties, and then run the full worksheet. Track your funnel in a spreadsheet: date, address, source, asking price, your maximum offer and the verdict. The classic mistakes: trusting a wholesaler's ARV; skipping the rehab estimate because the property is "just cosmetic"; falling for urgency; paying more because you have spent weeks looking; and sending outreach that is dishonest because "everyone does it."

The best deal is the one that works by your numbers and that you would be glad to explain to the seller's family.

PICTURE STUDY



Residence in the Fremont Neighborhood, Seattle, James Patrick Lee, September 13, 1910 · Photograph · University of Washington Libraries, Special Collections, Seattle (James Patrick Lee Photographs)

Image: Wikimedia Commons, public domain

James Patrick Lee photographed Seattle's streets, buildings and public works in the years when the young city was regrading hills and laying streetcar lines; his photographs are now held by the University of Washington Libraries. On September 13, 1910, he recorded this house in the Fremont neighborhood, probably to document the street in front of it. To an investor, it shows what a slow walk or drive through a neighborhood reveals: the condition of a roof and porch, plantings that have grown over windows, a retaining wall that someone must maintain, the streetcar line that made the location desirable. It opens this lesson because deals are found by people who look closely at the streets they know — and who treat the owners of those houses as neighbors.

Look closely

- Look at the shrubs crowding the porch and windows. Overgrown plantings are one of the small signs an investor driving for dollars notes.
- Find the long board retaining wall. It is a big-ticket item hidden in plain sight; a careful buyer prices its repair before making an offer.
- Notice the ladder against the building at the left. Work under way nearby can mean a neighborhood on the rise — or an owner struggling to keep up.

- Follow the streetcar tracks. Transportation drew buyers and renters here; location is the part of a deal no rehab can change.

Talk about it

1. If you walked past this house today, what three signs would make you research its owner in public records?
2. Why might the owner of a house like this be glad — or upset — to receive a letter from an investor? What makes the difference?
3. Leviticus forbids oppressing a neighbor when buying from him. What would that require of an investor writing to someone who has just lost a parent?

PROJECT

The Deal Funnel Notebook

For two weeks you will run a real deal funnel on paper. You will search public listings with investor keywords, screen every lead with the 70% rule or the Rental worksheet, and track the results. You will also write — but not send — an honest outreach letter for a parent to review. You will contact no seller, agent, wholesaler or owner.

You will need

- Public listing sites and your county assessor's website
- A spreadsheet for the funnel log (date, address, source, asking price, ARV or rent, rehab estimate, maximum offer, verdict)
- The Deal Analyzer (BRRRR and Rental worksheets) and a calculator
- Your deal binder

Steps

1. Search listings in one area with at least four investor keywords ("as is," "handyman," "estate," "TLC," "cash only") and with long days on market or price reductions; log at least 20 properties.
2. For each, estimate ARV or rent from a quick look at sold comps and a rough rehab from the photos, and compute the 70% rule maximum offer or a quick Rental worksheet result.
3. Mark each lead pass, maybe or no, and run the full BRRRR or Rental worksheet on the two best.
4. Compute your own funnel ratios (analyzed to "maybe" to full analysis) and estimate how many analyses a year you would need to buy one property.
5. With a parent, take a 20-minute walk or drive through one neighborhood and note (without photographing people or trespassing) three properties showing signs of neglect; look up their assessed values but do not contact anyone.
6. Write an honest outreach letter that passes every point of the lesson's checklist, and have a parent mark anything that could mislead.

7. Print the two full worksheets with verdicts, the funnel log and the letter, and file them in your deal binder.

INVESTOR'S NOTEBOOK

1. Make flashcards for MLS, days on market, off-market, driving for dollars, REO, foreclosure auction, probate, personal representative, wholesaler, assignment of contract and deal funnel.
2. Draw the deal funnel as a funnel: 200 analyzed → 20 offers → 2 deals, with the sources (MLS, agent, letters, network) feeding the top.
3. Write a trap list titled "Outreach Traps," ending with: SAY WHO I AM, TELL THE TRUTH, AND TAKE NO FOR AN ANSWER.

KEY FORMULAS

$$70\%\text{ rule maximum offer} = \text{ARV} \times 0.70 - \text{rehab}$$

$$\text{Offers needed} = \frac{\text{deals wanted}}{\text{acceptance rate}}, \quad \text{analyses needed} = \frac{\text{offers needed}}{\text{offer rate}}$$

$$\text{Conversations from letters} = \text{letters sent} \times \text{response rate}$$

$$\text{Wholesale price to you} = \text{contract price} + \text{assignment fee}$$

From history. After the savings-and-loan failures of the 1980s, Congress created the Resolution Trust Corporation in 1989 to take over failed thrifts and sell what they owned. Before it closed on December 31, 1995, the RTC resolved 747 institutions and sold off their loans, buildings and land — often by auction and sealed bid. It was one of the largest real estate sell-offs in American history, and it taught a generation of buyers that distressed sales reward those who know values and punish those who guess.

WORKED EXAMPLES

Example 1. In this example, an investor wants to buy two value-add rentals this year. From experience, about 1 in 10 properties analyzed earns an offer, and about 1 in 10 offers is accepted on terms that work. She also mails 600 honest letters, expecting about a 1% response, and about 1 in 6 conversations leads to an offer. How many on-market analyses and offers does she need, and how many offers might the letters add?

Show solution

1. Offers needed for 2 purchases: $2 \div 0.10 = 20$ offers.
2. Analyses needed: $20 \div 0.10 = 200$ properties — about 4 a week.
3. Letters: $600 \times 0.01 = 6$ conversations; offers $6 \div 6 = 1$.
4. So the letters might add about 1 offer — about 5% of the 20 needed.

Answer: About 200 analyses and 20 offers for 2 purchases; the 600 letters may add about one more offer. The funnel shows why analyzing deals weekly matters more than any single source.

Example 2. In this example, a wholesaler offers a house for $190,000 ($175,000 contract price plus a $15,000 assignment fee), claiming an ARV of $320,000 and rehab of $30,000. Your own sold comps support an ARV of $285,000, and your line-item rehab estimate is $48,000. Apply the 70% rule both ways.

Show solution

1. Wholesaler's numbers: $\$320{,}000 \times 0.70 - \$30{,}000 = \$194{,}000$ — the $190,000 price passes on paper.
2. Your numbers: $\$285{,}000 \times 0.70 - \$48{,}000 = \$199{,}500 - \$48{,}000 = \$151{,}500$.
3. Gap: $\$190{,}000 - \$151{,}500 = \$38{,}500$ over your maximum.
4. Ask for the wholesaler's comps and walk through with a contractor before any deposit.

Answer: On your numbers the house is worth at most about $151,500 to you, so at $190,000 you walk away or offer no more than $151,500 total. Wholesaler numbers that pass are not your numbers.

Example 3. An investor drafts this letter: "URGENT NOTICE regarding 412 Elm. Our family is looking for a home to raise our kids and LOVES your house! Offer expires Friday. Call now before it's too late." He actually plans to assign the contract to another investor. Apply the honesty checklist.

Show solution

1. Identity: he is an investor who plans to resell the contract, but the letter claims a family wants a home — false; rewrite with his real name and role.
2. Urgency: "URGENT NOTICE" and "expires Friday" create false pressure and imitate official mail — remove.
3. Fairness: state that he will make a written offer based on the home's condition and nearby sales, and invite the owner to compare it with an agent's opinion.
4. Respect: add "If you would rather not hear from me, tell me and I will remove you from my list," and honor it.
5. Law: check whether his state requires a license or disclosures to market or assign a contract.

Answer: As written, the letter is deceptive. An honest version names the sender as an investor, explains he may buy with others or assign his contract, makes no false claims or deadlines, invites independent advice and promises to stop on request.

PRACTICE

1. Easy Name four keywords that can help find value-add properties in listings.

   Show answer

   Any four of: "handyman special," "as is," "needs TLC," "estate sale," "cash only," "investor special," "fixer."

2. Easy What does REO mean, and how are REO properties usually sold?

   Show answer

   Real estate owned — property a lender took back through foreclosure. It is usually sold as is, often with bank addenda that shift risk to the buyer.

3. **Easy** Why should a beginner be cautious at a foreclosure auction?

Show answer

Buyers usually must pay cash quickly, cannot inspect the inside, may inherit occupants or liens and get limited title assurance, under rules that vary by state.

4. **Medium** In this example, an investor analyzes 150 properties a year, offers on 1 in 12 and gets 1 in 8 offers accepted. About how many purchases should she expect?

Show answer

Offers $150 \div 12 = 12.5$; purchases $12.5 \div 8 \approx 1.6$ — about one or two a year.

5. **Medium** In this example, ARV is $240,000 and rehab is $35,000. What is the 70% rule maximum offer?

Show answer

$\$240{,}000 \times 0.70 - \$35{,}000 = \$168{,}000 - \$35{,}000 = \$133{,}000$.

6. **Medium** In this example, a wholesaler's contract price is $142,000 and the assignment fee is $12,000. Your maximum offer by the 70% rule is $150,000. Should you buy?

Show answer

Your price would be $\$142{,}000 + \$12{,}000 = \$154{,}000$, which is $4,000 over your maximum. Negotiate down to $150,000 or less, or walk away — after verifying the ARV and rehab yourself.

7. **Medium** List four parts of an honest outreach letter.

Show answer

The investor's real name and role, no false urgency or official-looking design, a promise of a fair written offer based on condition and comps with an invitation to get independent advice, and an easy way to opt out that is honored permanently.

8. Hard Why is pretending to be a family looking for a home wrong when the writer is a wholesaler who plans to assign the contract?

Show answer

It is a deliberate falsehood that may persuade a seller to accept less or to trust the buyer in ways she would not if she knew the truth; it violates honesty in dealing and may violate state consumer-protection or wholesaling law.

9. Hard As of 2026, what does Oklahoma's Predatory Real Estate Wholesaler Prohibition Act require, and what should an investor in another state do?

Show answer

Since November 1, 2021, it has required a real estate license to publicly market an equitable interest in a purchase contract (the core of wholesaling). Investors elsewhere should check their own state's real estate commission, because a growing number of states regulate wholesaling.

10. Hard A personal representative of an estate tells you she must get court approval for any sale. How should that change your approach?

Show answer

Be patient and respectful: expect a longer timeline and possible court confirmation or overbidding rules under state probate law, make a fair written offer, and encourage her to consult the estate's attorney.

11. Challenge In this example, 800 letters cost \$0.85 each to print and mail, response is 1.25%, and 1 in 5 conversations leads to an offer, with 1 in 4 offers accepted. What is the cost per purchase?

Show answer

Cost $800 \times \$0.85 = \$680$; conversations $800 \times 0.0125 = 10$; offers $10 \div 5 = 2$; purchases $2 \div 4 = 0.5$. Cost per purchase $\$680 \div 0.5 = \$1{,}360$ — before counting the investor's time.

12. **Challenge** Write three sentences explaining how an investor can serve a seller well even while buying below retail.

Show answer

The investor can offer what the seller values besides price — speed, certainty, buying as is, flexible timing — and explain plainly why the offer is below retail. He should encourage the seller to compare it with listing through an agent and to seek advice. If listing would serve the seller better, the honest investor says so, and accepts that some of the best deals are the ones he lets go.

COMMON MISTAKES

- Trusting a wholesaler's or seller's ARV and rehab figures instead of pulling your own sold comps and estimating the rehab yourself.
- Assuming an auction or REO price is a bargain without accounting for no inspection, occupants, liens and as-is terms.
- Writing outreach that hides your identity, invents urgency or pretends to be a homebuyer when you plan to resell the contract.
- Ignoring state law on wholesaling, contract assignment and do-not-call or texting rules.
- Overpaying because you have looked for months; the funnel means most properties should be passed by.
- Contacting grieving or distressed owners without patience or respect, or failing to honor a request to stop.

> **Make it a game · Pass, Maybe or Offer.** A parent prints twelve real listings from your area with photos and prices, plus a sheet of quick ARV and rehab estimates. Players get ninety seconds per listing to compute the 70% rule maximum offer and hold up a card: Pass, Maybe or Offer (with a number). The parent reveals the "true" ARV and rehab (chosen in advance from sold comps). Score two points for a correct Pass, three for an Offer at or below the true maximum, and lose two for any Offer above it. The lesson the scores teach: most of the time, Pass is the right card.

> **Scripture.** “And if thou sell ought unto thy neighbour, or buyest ought of thy neighbour’s hand, ye shall not oppress one another:” (Leviticus 25:14, KJV)
>
> The law of Moses governed land sales between neighbors, and it named the danger plainly: oppression — using another’s weakness or ignorance against him. An investor may buy below retail, but never by deceit, pressure or taking advantage of grief. A fair offer, honestly explained, keeps this command.

6.2 Scoping and Estimating the Rehab

OBJECTIVES

- Walk a property with a written checklist, inspecting big-ticket systems before cosmetic items.
- Write a scope of work by room and by system, and price each line item as labor plus materials.
- Add an appropriate contingency (commonly 10–20%) and compare a line-item budget with a price-per-square-foot shortcut.
- Apply the EPA lead Renovation, Repair and Painting (RRP) rule to work on pre-1978 housing, and identify work that needs permits.
- Distinguish rental-grade from flip-grade finishes, and choose improvements that add rent or value over those that do not.

> **Warm-up.** Look at five photos of an older house for sale near you. In five minutes, list everything you think needs work, then circle the three items that would cost the most. Keep the list; at the end of the lesson you will compare it with a real scope of work.

WATCH

How to Estimate Rehab Costs When You're Not an Expert Remodeler (advice from J Scott)

Coach Carson · 10:14

https://www.youtube.com/watch?v=hZd_69tqsTY

> **WHEN TO WATCH**
> Watch after the third core idea. J Scott explains how a beginner learns to estimate rehab costs; write each step he gives and decide where it belongs in your own walk-through checklist.

BACKUP VIDEO

3 Ways to Estimate Rehab Costs (Even on Your FIRST Deal)

BiggerPockets · 16:43

https://www.youtube.com/watch?v=fn2BgjljpjY

Watch on project day before you price your line items. Anson Young compares three estimating methods; write each method and its weakness, and decide which one you used for each part of your budget.

KEY TERMS

scope of work (SOW)

A written list of every repair and improvement to be done, organized by room or system, with quantities, materials and standards of finish.

line item

One priced entry in a rehab budget — a task with its quantity, unit cost and total, including labor and materials.

contingency

An amount added to a rehab budget, commonly 10–20%, for problems discovered after work begins.

big-ticket items

Costly systems inspected first on any walk-through: roof, foundation and structure, electrical, plumbing and sewer line, heating and cooling, water heater and windows.

price per square foot (rehab)

A rough estimate of rehab cost from the home's size multiplied by a cost per square foot for the level of work; a screening tool, not a budget.

rental-grade finish

Durable, easily replaced, moderately priced materials chosen to withstand tenants and keep turnover costs low.

flip-grade finish

Finishes chosen to match what buyers expect in the neighborhood's recently sold, renovated comparable homes.

building permit

Written permission from the local building department to do regulated work, followed by inspections to confirm it meets code.

RRP rule

The EPA's Lead Renovation, Repair and Painting rule, requiring certified firms and lead-safe work practices for paid work that disturbs paint in housing built before 1978.

lead-safe certified firm

A contractor or company certified by EPA (or an authorized state) whose workers are certified renovators or trained by one.

sewer scope

A camera inspection of the line from the house to the public sewer, used to find root intrusion, breaks or sags before buying.

CORE IDEAS

The story. In 1948 a leg of Margaret Truman's piano broke through the floor of her room in the White House. Engineers who had already been worried about sinking floors and swaying chandeliers looked closer and found that the house, begun in 1792, was in danger of collapse: weakened wooden beams, overloaded walls, outdated wiring and plumbing. One engineer remarked that the house was standing only "out of habit." President Truman and his family moved across the street to Blair House, and in 1949 Congress appropriated $5.4 million for the work. Contractors removed the entire interior, leaving only the old stone exterior walls, dug a new two-story basement, set the house on concrete and 660 tons of steel, and rebuilt every room inside. The Trumans moved back in the spring of 1952. A repair that began

with a broken floorboard became the most complete reconstruction in the house's history — because no one had looked behind the walls in time.

How they figured it out. Every rehab estimate is a guess about what lies behind walls, and the profession has learned to guess carefully: inspect the expensive systems first, write each task down, price it from real quotes, and add a cushion for what cannot be seen. The law added rules for one hidden hazard in particular. The Consumer Product Safety Commission banned lead-containing paint for consumer use effective in 1978, so homes built before 1978 may hold lead paint under newer coats. Disturbing it releases dust that harms children. In 2008 the EPA issued its Lead Renovation, Repair and Painting rule, fully effective April 22, 2010: anyone paid to disturb painted surfaces in pre-1978 housing must be a **lead-safe certified firm** using trained renovators and lead-safe practices. The rule applies to landlords and property managers working on their rentals, and to owners who flip houses for profit.

The big idea. A rehab budget is built, not guessed. You walk the property with a checklist, write a **scope of work** — every task, room by room and system by system — and price each **line item** as labor plus materials, using contractor bids, supplier prices and your own past jobs. Then you add a **contingency**, commonly 10% for a cosmetic job on a newer house and 15–20% or more for older houses, structural work or anything you could not fully see. In this example a 1,250-square-foot house needs $55,000 of line items; a 15% contingency adds $8,250, for a $63,250 rehab budget. That number goes into the BRRRR or Fix & flip worksheet, and it decides how much you can pay for the house. Get it wrong by $20,000 and a good deal becomes a loss.

Inspect the **big-ticket items** first, because they decide whether the deal works: roof (age, layers, sagging, leaks), foundation and structure (cracks, sloping floors, water in the basement), electrical (panel brand and size, ungrounded or knob-and-tube wiring), plumbing (supply pipe material, leaks, water pressure) and the **sewer line** (a camera **sewer scope** before buying is cheap insurance), heating and cooling, water heater and windows. Look for moisture, mold and pests. Only then list cosmetic work: paint, flooring, fixtures, cabinets, counters, appliances, landscaping and cleaning. Many investors use a printed checklist and photograph every item. A professional home inspection — with a parent present, when you are an adult buyer — catches what you miss, and the inspector's report becomes part of your scope.

Shortcuts have a place but not the final word. A **price per square foot** for a level of work (in this example, $30 for a mid-level cosmetic rehab) quickly screens listings, but it cannot see a failing roof or a bad sewer line. Finish level matters too. **Rental-grade** finishes are durable and cheap to replace — luxury vinyl plank instead of carpet, a semi-gloss paint you can touch up, a standard faucet you can buy again next year. **Flip-grade** finishes match what the neighborhood's renovated comps had when they sold. Spend first where money adds rent, value or safety: working systems, a sound roof, a clean kitchen and bath, good flooring, fresh paint. A third bathroom or a luxury counter in a modest rental often adds less than it costs — the principle of contribution again.

Permits and the RRP rule belong in every scope. Most cities require **permits** for structural, electrical, plumbing, mechanical and roofing work, and many for window replacement; inspections follow. Unpermitted work can fail an appraisal, cloud a sale, void insurance and endanger tenants. For homes built before 1978, the **RRP rule** generally applies to paid work disturbing more than 6 square feet of painted surface per room inside or 20 square feet outside, and always to window replacement and demolition of painted surfaces, regardless of size. Covered work requires a certified firm, EPA's lead pamphlet given to occupants before work, containment, prohibited practices avoided (such as open-flame burning or power sanding without a HEPA attachment) and careful cleanup. Pre-1978 rentals and sales also require the federal lead-based paint disclosure. Budget the extra time and cost; never ask a contractor to skip them.

Run the numbers. Build the budget in a spreadsheet with columns for room or system, task, quantity, unit, unit cost (labor + materials), total and source. Add the contingency as a separate line. Enter the total, with contingency, as the rehab budget in the **BRRRR** worksheet (which has no separate contingency field) or enter the line-item total and contingency percent in the **Fix & flip** worksheet. Rehab time also matters: each month of work adds holding costs and short-term interest, which the worksheets compute from the months you enter. The classic mistakes: pricing paint and floors carefully while ignoring the roof; using a television show's prices; leaving contingency at zero because "I walked it twice"; forgetting permits, dumpsters, cleaning and appliance delivery; and choosing finishes that look wonderful in a listing and fall apart under tenants.

PICTURE STUDY



The Shell of the White House during the Renovation, Abbie Rowe, May 17, 1950 · Photograph · U.S. National Archives and Records Administration

Image: Wikimedia Commons, public domain

Abbie Rowe was a National Park Service photographer who documented the White House and its presidents for more than twenty years. During the Truman reconstruction he photographed the work almost day by day, and his pictures are now in the National Archives. This one, made on May 17, 1950, shows the house as almost no one has seen it: an empty shell held up by steel while machines dig a basement inside the historic walls. It opens this lesson because it is the most famous picture ever taken of what was behind the walls — and of what a scope of work becomes when it was not written in time.

Look closely

- Find the temporary steel columns and braces. The old walls could not stand on their own once the interior was removed.
- Look at the window openings. Every one would need new framing, glass and finish — line items multiplied across a whole building.
- Notice the tractor and dump truck inside the house. The new basement was dug within the old walls, a job no shortcut estimate could have priced.
- Look at the patched and scarred brick. A century and a half of repairs, alterations and fires left the structure weaker than its handsome exterior suggested.

Talk about it

1. What signs might the engineers have noticed earlier, and which items on your walk-through checklist would catch similar problems in a house?
2. Why do you think the reconstruction cost so much more than a repair of the broken floor? What does that teach about contingency?
3. Jesus said a builder first sits down and counts the cost. How does honest estimating protect not only the investor but also the people who will live in the house?

PROJECT

The Line-Item Rehab Budget

You will build a line-item rehab budget for a real listing from its photos and description, using a spreadsheet. You will price each line from public sources — home-improvement store prices, published cost guides and the listing's own details — and compare your total with a price-per-square-foot shortcut. Purchases are pretend; you do not visit or contact anyone.

You will need

- A real listing of an older house (ideally built before 1978) with at least 20 photos
- A spreadsheet with columns for room or system, task, quantity, unit, unit cost, total and source
- Home-improvement store websites for material prices, and a parent or mentor who has done home repairs to review labor estimates
- The Deal Analyzer (BRRRR and Fix & flip worksheets) and your deal binder

Steps

1. Walk the listing photos with the lesson's checklist, big-ticket items first; record what you can see and mark "unknown" for anything you cannot.
2. Write the scope of work by room and system, with quantities (square feet of floor, squares of roof, number of windows).
3. Price each line as labor plus materials and write the source; ask a parent or mentor to check your labor guesses.
4. Add a contingency of 10%, 15% or 20% and write one sentence justifying your choice from the house's age and unknowns.
5. If the house was built before 1978, mark every line covered by the RRP rule and note which lines need permits.
6. Compare your total with a price-per-square-foot shortcut and explain the difference.

7. Enter the budget in the BRRRR or Fix & flip worksheet with comp-based ARV and rent, print it and write a verdict for your deal binder.

INVESTOR'S NOTEBOOK

1. Make flashcards for scope of work, line item, contingency, big-ticket items, rental-grade and flip-grade finish, building permit, RRP rule, lead-safe certified firm and sewer scope.
2. Draw a house cross-section and label the big-ticket items in the order you inspect them, with a red dot on each one a cosmetic shortcut would miss.
3. Write a trap list titled "Rehab Traps," ending with: ROOF BEFORE PAINT, AND CONTINGENCY IS NOT OPTIONAL.

KEY FORMULAS

$$\text{Line item} = \text{quantity} \times \text{unit cost (labor + materials)}$$
$$\text{Rehab budget} = \sum \text{line items} \times (1 + \text{contingency \%})$$
$$\text{Shortcut estimate} = \text{square feet} \times \text{cost per square foot}$$
$$\text{Roofing cost} = \text{squares} \times \text{cost per square}, \quad 1 \text{ square} = 100 \text{ sq ft of roof}$$

From history. Nothing from the old White House interior was wasted if it could be helped. In 1951 the commission overseeing the reconstruction began a souvenir program, open to anyone, that sold removed materials at modest prices — enough bricks to face a fireplace, nails, plaster, and small wood kits for making gavels and canes — for 25 cents to $5. The program paid its own way and added $10,000 toward the project: salvage value, carefully counted.

Example 1. In this example, a 1,250-square-foot 1958 house needs: interior paint $5,000; LVP flooring 900 sq ft at $5.50 installed; kitchen (stock cabinets, laminate counter, sink and faucet) $11,500; appliances $2,800; bathroom refresh $6,800; water heater $1,700; electrical panel and required outlets $3,200; roof 18 squares at $550; exterior paint and repair with lead-safe practices $6,500; permits $1,200; dumpster, cleaning and miscellaneous $1,450. Add a 15% contingency. What is the rehab budget?

Show solution

1. Flooring: $900 \times \$5.50 = \$4{,}950$. Roof: $18 \times \$550 = \$9{,}900$.
2. Line items: $\$5{,}000 + \$4{,}950 + \$11{,}500 + \$2{,}800 + \$6{,}800 + \$1{,}700 + \$3{,}200 + \$9{,}900 + \$6{,}500 + \$1{,}200 + \$1{,}450 = \$55{,}000$.
3. Contingency: $0.15 \times \$55{,}000 = \$8{,}250$.
4. Rehab budget: $\$55{,}000 + \$8{,}250 = \$63{,}250$.

Answer: $63,250. Enter it as the rehab budget in the BRRRR worksheet, or enter $55,000 with a 15% contingency in the Fix & flip worksheet.

Example 2. A friend estimates the same house's rehab with a shortcut of $30 per square foot. Compare his estimate with the line-item total and find what the shortcut missed.

Show solution

1. Shortcut: $1{,}250 \times \$30 = \$37{,}500$.
2. Line items: $55,000; difference $\$55{,}000 - \$37{,}500 = \$17{,}500$, so the shortcut is $\$17{,}500 \div \$55{,}000 \approx 32\%$ low.
3. The big-ticket items explain it: roof $9,900 + exterior $6,500 + panel $3,200 = $19,600 of work no interior "cosmetic" rate expects.
4. With contingency, the true budget is $63,250 — $25,750 above the shortcut.

Answer: The shortcut is about $17,500 (32%) low before contingency, mostly because it ignores the roof, exterior and electrical. Use shortcuts to screen listings; use line items to make offers.

Example 3. In this example, a landlord owns a 1962 rental. She plans to replace six windows and to have trim sanded and repainted in two rooms (about 10 square feet of painted surface in each room). Must the work follow the EPA RRP rule, and what does that require? (Apply the rule step by step.)

Show solution

1. Age: built before 1978, so the rule can apply.
2. Paid work: she is hiring a contractor (and a landlord doing work on her rental is also covered).
3. Size and type: window replacement is always covered; 10 square feet of interior paint per room is more than the 6-square-foot minor-repair limit.
4. Requirements: hire an EPA lead-safe certified firm; give the tenants EPA's lead pamphlet before work; use containment and lead-safe practices; no open-flame burning or power sanding without HEPA; clean and verify cleaning at the end.

Answer: Yes. Both tasks are covered renovation under the RRP rule, so she must use a certified firm following lead-safe practices, and she should add the extra time and cost to her scope and budget.

PRACTICE

1. Easy Name five big-ticket items to inspect first on a walk-through.

   Show answer

   Any five of: roof, foundation and structure, electrical, plumbing and sewer line, heating and cooling, water heater, windows.

2. Easy What is a contingency, and what range do many investors use?

   Show answer

   An amount added to the budget for problems found after work begins, commonly 10–20% depending on the house's age and the unknowns.

3. Easy For which homes does the EPA RRP rule apply?

   Show answer

   Housing (and child-occupied facilities) built before 1978, when work for pay disturbs painted surfaces beyond the minor-repair limits.

4. **Medium** In this example, a roof is 22 squares and costs $575 a square installed. What does it cost?

   Show answer

   $22 \times \$575 = \$12{,}650.$

5. **Medium** In this example, line items total $38,400. Find the budget with a 12% contingency.

   Show answer

   $\$38{,}400 \times 1.12 = \$43{,}008.$

6. **Medium** In this example, 1,100 square feet of LVP costs $2.40 a square foot for materials and $2.10 for labor, plus 8% waste on materials. Find the flooring cost.

   Show answer

   Materials $1{,}100 \times 1.08 \times \$2.40 = \$2{,}851.20$; labor $1{,}100 \times \$2.10 = \$2{,}310$; total $\$5{,}161.20$.

7. **Medium** Why is rental-grade luxury vinyl plank often chosen over carpet in a rental?

   Show answer

   It resists water and stains, is easy to clean between tenants and can be repaired plank by plank, so it lowers turnover cost and lasts longer than carpet.

8. **Hard** In this example, a shortcut estimate is $28 per square foot on a 1,400-square-foot house, but a sewer scope finds a broken line ($7,800) and the roof needs replacing ($11,000). How far off is the shortcut on those two items alone, and what does that suggest?

   Show answer

   Shortcut $1{,}400 \times \$28 = \$39{,}200$. The two items add $\$7{,}800 + \$11{,}000 = \$18{,}800$ — almost half again the shortcut. Shortcuts screen; line items after inspection decide.

9. Hard A homeowner sands 5 square feet of trim in one room on Monday and 4 square feet in the same room on Thursday in her 1940 rental. Is it minor repair under the RRP rule?

Show answer

No. EPA counts all work in the same room within 30 days together, so $5 + 4 = 9$ square feet exceeds the 6-square-foot limit; and as a landlord she is covered, so lead-safe certified work is required.

10. Hard Give two reasons not to skip permits on an electrical panel replacement in a rental.

Show answer

Any two: unpermitted work can be unsafe for tenants; it can fail an appraisal or a buyer's inspection; it can void insurance coverage after a fire; and the city can require it to be opened and redone.

11. Challenge In this example, the BRRRR target says all-in cost must be at most $193,750. Price $142,000, closing $4,000 and holding $3,600 are fixed. What is the largest rehab budget (with contingency) that still allows a full cash-out, and what line-item total does that allow at 15% contingency?

Show answer

Rehab $\$193{,}750 - \$142{,}000 - \$4{,}000 - \$3{,}600 = \$44{,}150$. Line items $\$44{,}150 \div 1.15 \approx \$38{,}391$.

12. Challenge Write a three-sentence scope note explaining to a mentor why you chose a 20% contingency on a 1925 house.

Show answer

The house is nearly a century old, with original plumbing I could not see and a basement that showed water stains. It was built before 1978, so lead-safe work will add time and cost to paint, windows and trim. A 20% contingency keeps a surprise in the walls from turning the deal into a loss, and if I do not use it, it stays in my reserves.

COMMON MISTAKES

- Estimating cosmetic work carefully while ignoring the roof, sewer line, panel or foundation.
- Treating a price-per-square-foot shortcut as a budget instead of a screen.

- Leaving contingency at zero, or spending it on upgrades instead of surprises.
- Choosing flip-grade or luxury finishes for a rental where they add less rent than they cost.
- Ignoring the RRP rule on pre-1978 homes, or asking a contractor to skip lead-safe practices or permits.
- Forgetting permits, dumpsters, cleaning, appliance delivery and the holding costs of a longer rehab.

Make it a game · Guess the Line Item. A parent collects ten real prices from a home-improvement store website or a published cost guide: a water heater, a box of LVP, a gallon of paint, a toilet, a range, a sheet of drywall, a vanity, a roll of insulation, an exterior door, a bundle of shingles. Read each item aloud; every player writes a guess. Closest guess wins a point; a guess within 10% wins two. After ten items, players use the real prices to price one bathroom refresh together and add a 15% contingency — and compare it with their first guess.

Scripture. "For which of you, intending to build a tower, sitteth not down first, and counteth the cost, whether he have sufficient to finish it? Lest haply, after he hath laid the foundation, and is not able to finish it, all that behold it begin to mock him, Saying, This man began to build, and was not able to finish." (Luke 14:28–30, KJV)

Jesus used a builder's budget to teach the cost of following Him, and the picture works because every listener knew a half-finished tower. A rehab scope with a contingency is counting the cost before you begin. The investor who does it carefully protects his money, his workers and the family who will someday live behind those walls.

6.3 Managing Contractors, Permits and the Budget

OBJECTIVES

- Compare three written bids on the same scope of work and choose a contractor by license, insurance, references and terms as well as price.
- Explain the parts of a sound renovation contract, including scope, schedule, price, draw schedule, change orders, permits and lien waivers.
- Build a draw schedule that pays only for completed, inspected work and keeps a final payment for the punch list.
- Explain mechanics' liens and how conditional and unconditional lien waivers protect an owner who has paid.
- Track a rehab against its budget and contingency, decide how to handle overruns and change orders, and pay workers honestly and promptly.

> **Warm-up.** Imagine you hire someone to paint your family's fence for $600 and he asks for all of it before starting. In five minutes, write what could go wrong, then write a fairer way to pay him that protects both of you.

WATCH

7 Steps For Finding GREAT Contractors For Home Renovations

BiggerPockets · 9:15

https://www.youtube.com/watch?v=50xu-dR4gOE

> **WHEN TO WATCH**
> Watch after the third core idea. Brandon Turner gives his seven-step process; write the seven steps and add, beside each, which part of this lesson's contract or payment checklist it supports.

BACKUP VIDEO

Hiring a Contractor: 9 Things You MUST Know

Essential Craftsman · 15:32

https://www.youtube.com/watch?v=BYltWFjS5D0

Watch on project day, before you write your contract checklist. Scott Wadsworth, a veteran builder, explains hiring from the contractor's side; add any of his nine points that your checklist is missing.

KEY TERMS

general contractor

A licensed contractor who takes responsibility for an entire project, hiring and supervising subcontractors and suppliers.

bid

A contractor's written price to perform a defined scope of work, with materials, schedule and terms stated.

draw schedule

The agreed plan for paying a contractor in installments as defined stages of work are completed and inspected.

change order

A written, signed amendment to a contract that changes the scope, price or schedule.

lien waiver

A signed release by a contractor, sub or supplier giving up lien rights for amounts paid; conditional waivers take effect when payment clears, unconditional ones immediately.

subcontractor

A tradesperson or firm hired by the general contractor (or owner) for one part of the work, such as plumbing or electrical.

licensed, bonded and insured

Registered with the state as required, backed by a surety bond where required, and carrying liability (and, for employees, workers' compensation) insurance.

retainage

A portion of each payment or of the contract price held back until the work is finished and accepted.

mechanics' lien

A claim against real property by a contractor, subcontractor or supplier who was not paid for work or materials that improved it.

punch list

The final list of small items to fix or finish before the owner accepts the work and makes the last payment.

certificate of insurance

A document from the contractor's insurer showing current coverage, ideally sent to the owner directly by the insurer or agent.

CORE IDEAS

The story. When the Brooklyn Bridge was being built, its chief engineer, Washington Roebling, had been crippled by caisson disease from working in the compressed-air chambers under the river. He directed the work from his bedroom window with a telescope, while his wife, Emily Warren Roebling, carried his instructions to the engineers and learned so much that she managed much of the daily work herself. In 1877 a contract to supply steel wire for the great cables went to a manufacturer named J. Lloyd Haigh. Later sampling by Roebling's assistant engineers revealed that Haigh had substituted inferior wire: of eighty rings tested, only five met the standard. The bad wire was already spun into the cables. Roebling had 150 extra wires added to each cable, and Haigh was required to pay for the extra good wire. The bridge opened on May 24, 1883, and still carries traffic — because the owner's people tested what the contractor delivered.

How they figured it out. Contractors have the opposite worry: owners who do not pay. In 1791 the commissioners building the new federal city of Washington, at a meeting attended by Thomas Jefferson and James Madison, urged Maryland to protect the builders they needed to attract, and in December 1791 Maryland passed the first American **mechanics' lien** law, giving master builders a claim on the house and ground for unpaid sums. Every state now has a lien law. Its practical effect for an investor is simple: if you pay your general contractor but he fails to pay his plumber or lumber yard, they may be able to place a lien on *your* property. That is why careful owners collect **lien waivers** from the contractor, and from major subcontractors and suppliers, with every payment.

The big idea. Managing a rehab means controlling three things: who does the work, what they are paid for, and when they are paid. Get at least three written **bids** on the same written scope of work, so they can be compared line by line. Hire contractors who are **licensed, bonded and insured** as your state requires — check the license on the state's official lookup site, and get a **certificate of insurance** sent by the insurer. Call references and look at past jobs. Then sign a written contract and pay by a **draw**

schedule: installments tied to completed, inspected stages of work, never far ahead of what is done. The cheapest bid is often the most expensive job, and the contractor who demands most of the money up front is telling you something.

A sound renovation contract states the full scope of work (attach it), the materials and finish standards, the price and what is included, the start and completion dates, who obtains and pays for **permits** and inspections, the **draw schedule**, how **change orders** are priced and approved (in writing, signed, before the work), cleanup, warranties and how disputes are resolved. Many states set rules for home-improvement contracts, such as required disclosures, cancellation rights or a cap on the deposit; check yours. Keep a **retainage** or final payment until the **punch list** is done, the final inspection has passed and final lien waivers are signed. Change orders are where budgets die: every "while you're at it" adds cost and time, so decide most choices before work begins.

Track the job like a business. Keep a budget tracker with each line item's budget, approved change orders, amounts paid and the remaining contingency. Visit or have a trusted representative visit often, photograph progress, and compare it with the draw request before paying. Use inspections — the city's and your own — as gates for payment. When a surprise appears behind a wall, get a written price before the work, decide whether it is a true necessity or a nice-to-have, and pay for necessities from contingency, not by skipping something essential elsewhere. Every extra month costs holding costs and short-term interest, so schedule matters as much as price. And watch for warning signs: a contractor who wants cash only, pressures you to skip permits, cannot show a license or keeps asking for money before work is done.

Honest dealing runs both ways. Scripture commands that a hired worker's wages not be held back overnight, and the modern application is plain: when work is done right and inspected, pay promptly and in full, as the contract says. Do not invent complaints to delay payment, squeeze workers after they have finished, or ask for "cash, no paperwork" to dodge taxes or permits. Treat crews with courtesy and keep the site safe — for everyone, but especially when tenants or neighbors live nearby. A reputation as an owner who pays on time, communicates clearly and does not change the job every day is worth more than any discount; good contractors are busy, and they choose whom to work for. Students should never hire or direct a

contractor themselves; projects in this course are done on paper, and any conversation with a contractor happens with a parent present.

Run the numbers. The rehab budget you enter in the **BRRRR** or **Fix & flip** worksheet is only as good as the contract behind it. Before you buy, use the middle bid (or your line-item estimate, whichever is higher) plus a contingency, and the contractor's written schedule for the months until refinance or sale. During the job, update the worksheet when change orders or delays occur: a longer schedule raises holding costs and short-term interest, which raise the all-in cost and the cash left in the deal. The classic mistakes: hiring the lowest bid without checking the license; paying 50% up front; approving changes by text with no price; forgetting lien waivers; letting the contingency pay for upgrades; and leaving the schedule at six months in the worksheet when the contractor has already said ten.

PICTURE STUDY



A Carpenter's Workshop, Christen Dalsgaard, 1855 · Oil on canvas · The Hirschsprung Collection, Copenhagen

Image: Wikimedia Commons, public domain

Christen Dalsgaard was a Danish painter of the mid-1800s known for honest, careful scenes of country life and work. In this small painting there are no people at all — only a carpenter's workshop, with its bench, tools and shavings, waiting for the worker to return. It hangs in the Hirschsprung Collection in Copenhagen. It opens this lesson because it reminds us that every rehab line item is someone's skilled labor: tools bought and kept sharp, hours of work, a living earned. Managing contractors well begins with respecting the craft.

Look closely

- Look at the tools hung in order on the wall. A good tradesman keeps his tools ready; a good owner keeps his scope, schedule and payments just as orderly.
- Find the shavings on the floor. Work has been done here today — the kind of progress a careful owner verifies before paying a draw.
- Notice the light from the window falling on the bench. Dalsgaard makes ordinary work look worthy of attention.
- See the open door to the house beyond. The workshop and the home are side by side; work and family life were close together.

Talk about it

1. What would you want to know about the person who works at this bench before you hired him to work on your property?
2. Why do you think Dalsgaard painted the workshop empty? What does it make you notice about the work itself?
3. Leviticus 19:13 forbids keeping a hired worker's wages overnight. What does prompt, honest payment look like on a renovation job today?

PROJECT

The Contractor File

You will prepare everything an owner needs before hiring a contractor for the rehab you budgeted in Lesson 6.2 — but you will not contact any contractor. You will use your state's official license lookup to see what a license record shows, draft a sample contract checklist and draw schedule, and build a budget tracker you could use on a real job.

You will need

- Your line-item rehab budget from Lesson 6.2
- Your state's official contractor license lookup (search "[your state] contractor license lookup" and use only a government site)
- A spreadsheet for the budget tracker and draw schedule
- The Deal Analyzer (BRRRR or Fix & flip worksheet) and your deal binder

Steps

1. On your state's official site, look up any two licensed general contractors in your area (you will not contact them) and record what the record shows: license type, status, expiration, bond and insurance information and any complaints.
2. Write a one-page contract checklist with every item from the lesson: scope, materials, price, dates, permits, draws, change orders, cleanup, warranty, lien waivers and dispute resolution.
3. Build a draw schedule for your Lesson 6.2 budget with five or six inspected stages and a final payment after the punch list.
4. Build a budget tracker with columns for line item, budget, approved changes, paid to date, remaining and notes, plus a contingency line.
5. Invent three realistic surprises (with a parent or mentor's help) and run them through the tracker, deciding which are necessities paid from contingency and which you refuse.
6. Add two months of delay to your BRRRR or Fix & flip worksheet and record how much the all-in cost and cash left in the deal change.

7. Print the checklist, draw schedule, tracker and both worksheets, and file them with a one-paragraph lesson-learned note in your deal binder.

INVESTOR'S NOTEBOOK

1. Make flashcards for general contractor, subcontractor, bid, licensed bonded and insured, draw schedule, retainage, change order, mechanics' lien, lien waiver, punch list and certificate of insurance.
2. Draw a timeline of a rehab with each draw as a gate: work done → inspection passed → lien waiver received → payment made.
3. Write a trap list titled "Contractor Traps," ending with: NEVER PAY FOR WORK THAT IS NOT DONE, AND NEVER HOLD BACK PAY FOR WORK THAT IS.

KEY FORMULAS

$$\text{Draw amount} = \text{contract price} \times \text{stage percentage}$$

$$\text{Contingency remaining} = \text{contingency} - \sum \text{approved necessary overruns}$$

$$\text{Added interest from delay} = \text{short-term loan} \times \frac{\text{rate}}{12} \times \text{extra months}$$

$$\text{Added holding cost} = \text{monthly holding cost} \times \text{extra months}$$

From history. Emily Warren Roebling had no formal engineering degree, yet during the years her husband was confined to his room she studied higher mathematics, materials and cable construction so she could carry his instructions accurately and answer engineers' questions. Shortly before the bridge opened on May 24, 1883, she became the first person to ride across it in a carriage. A plaque on the bridge today honors her, her husband and his father, John A. Roebling, who designed it.

Example 1. In this example, a licensed general contractor's $48,000 contract covers a rental rehab. Build a draw schedule: a 10% deposit at signing (allowed by your state in this example), 20% when demolition and framing repairs are done, 20% when rough plumbing and electrical pass inspection, 20% when drywall is finished and cabinets are set, 20% when finishes are complete, and a final 10% after the final inspection, punch list and final lien waivers.

Show solution

1. Deposit: $0.10 \times \$48{,}000 = \$4{,}800$.
2. Each 20% stage: $0.20 \times \$48{,}000 = \$9{,}600$, four times: $4 \times \$9{,}600 = \$38{,}400$.
3. Final: $0.10 \times \$48{,}000 = \$4{,}800$.
4. Check: $\$4{,}800 + \$38{,}400 + \$4{,}800 = \$48{,}000$; collect a conditional lien waiver with each draw and unconditional waivers once each payment clears.

Answer: $4,800, then $9,600 at each of four inspected stages, then $4,800 at the end — total $48,000. The owner never pays far ahead of completed work, and the final 10% keeps the punch list honest.

Example 2. In this example, the rehab budget is $55,000 of line items plus a 15% contingency ($8,250). During demolition the crew finds a rotted bathroom subfloor ($3,400), the electrician must upgrade the panel beyond the original plan (+$1,900), and the inspector requires hardwired smoke and carbon-monoxide alarms ($450). The owner is also tempted by quartz counters (+$2,600 over laminate). The job runs two months long, with holding costs of $600 a month and a $184,000 short-term loan at 11%. How should the owner handle it?

Show solution

1. Necessary overruns: $\$3{,}400 + \$1{,}900 + \$450 = \$5{,}750$; contingency left $\$8{,}250 - \$5{,}750 = \$2{,}500$.
2. Upgrade: $\$2{,}600 > \$2{,}500$ — it would exhaust the contingency with work not yet finished; decline it and keep rental-grade laminate.
3. Delay: holding $2 \times \$600 = \$1{,}200$; interest $\$184{,}000 \times 0.11 \div 12 \times 2 = \$3{,}373.33$.
4. The delay adds $\$1{,}200 + \$3{,}373.33 = \$4{,}573.33$ to the all-in cost; update the BRRRR worksheet's months and holding inputs.

Answer: Pay the three necessary items from contingency ($2,500 left), refuse the upgrade, and add about $4,573 of delay costs to the all-in cost — which raises the cash left in the deal by the same amount.

Example 3. Three bids arrive on the same scope. Bid A: $38,000, cash only, no license number given, wants 50% up front, “about a month.” Bid B: $44,500, license verified on the state site, certificate of insurance sent by the agent, three references, 10% deposit and a stage-by-stage draw schedule, ten weeks. Bid C: $52,000, licensed and insured, but the scope is vague with large “allowances.” Choose a contractor using the lesson’s checklist.

Show solution

1. License and insurance: A fails; B and C pass.
2. Payment terms: A’s 50% up front = $19,000 before any work is a red flag; B’s 10% deposit and draws pay only for completed work.
3. Scope: C’s allowances leave the true price unknown; B priced the written scope line by line.
4. Price and schedule: B is $6,500 more than A, but A’s risk of abandonment, liens or failed inspections is far larger; B’s ten weeks goes into the worksheet’s months.

Answer: Choose B. It is licensed, insured and referenced, prices the written scope, and is paid by inspected stages. The cheapest bid fails the basic checks, and the most expensive is too vague to compare.

PRACTICE

1. Easy Why get at least three bids on the same written scope?

   Show answer

   So the prices can be compared line by line, unusual bids stand out, and the owner learns the fair market price for the work.

2. Easy What is a change order, and how should it be approved?

   Show answer

   A change to the contract’s scope, price or schedule; it should be written, priced and signed by both parties before the changed work begins.

3. **Easy** What is a punch list?

Show answer

The final list of small fixes and unfinished items that must be completed before the owner accepts the job and makes the final payment.

4. **Medium** In this example, a $36,000 contract has a 10% deposit, three 25% draws and a final payment. How much is the final payment?

Show answer

Deposit $\$3{,}600$; draws $3 \times \$9{,}000 = \$27{,}000$; final $\$36{,}000 - \$3{,}600 - \$27{,}000 = \$5{,}400$ (15%).

5. **Medium** In this example, the contingency is $6,000. Approved necessary overruns are $2,200 and $1,750. How much contingency remains?

Show answer

$\$6{,}000 - \$2{,}200 - \$1{,}750 = \$2{,}050$.

6. **Medium** An owner paid his general contractor in full, but the contractor never paid the plumber. What can the plumber do, and what document would have protected the owner?

Show answer

Under the state's lien law the plumber may be able to file a mechanics' lien on the property. Lien waivers from the plumber (and other subs and suppliers) with each payment would have protected the owner.

7. **Medium** In this example, a $160,000 short-term loan at 12% runs three months longer than planned. What is the extra interest?

Show answer

$\$160{,}000 \times 0.12 \div 12 \times 3 = \$4{,}800$.

8. **Hard** What is the difference between a conditional and an unconditional lien waiver, and when should each be signed?

Show answer

A conditional waiver releases lien rights only when the stated payment actually clears, so it can be signed when the payment is made; an unconditional waiver releases them immediately and should be signed only after the funds have cleared.

9. Hard A contractor offers a 10% discount for cash with “no permits, no paperwork.” List three risks to the owner.

Show answer

Any three: unpermitted work may be unsafe and fail inspection or appraisal; insurance may deny claims from it; there is no written scope or proof of payment if a lien or dispute arises; and it may involve tax evasion the owner should not join.

10. Hard In this example, delays add $1,800 of holding costs and $3,600 of interest to a BRRRR whose cash left in the deal was $12,000. What is the new cash left in, and why?

Show answer

$\$12{,}000 + \$1{,}800 + \$3{,}600 = \$17{,}400$. Delay costs raise the all-in cost, and since the refinance loan depends on ARV, not cost, every added dollar stays in the deal.

11. Challenge In this example, Bid A is $40,000 for 8 weeks and Bid B is $43,000 for 5 weeks. Holding costs are $700 a month and short-term interest is $1,650 a month. Using 4.33 weeks per month, which is cheaper in total?

Show answer

Monthly carrying $\$700 + \$1{,}650 = \$2{,}350$. A: $\$40{,}000 + (8 \div 4.33) \times \$2{,}350 \approx \$40{,}000 + \$4{,}342 = \$44{,}342$. B: $\$43{,}000 + (5 \div 4.33) \times \$2{,}350 \approx \$43{,}000 + \$2{,}714 = \$45{,}714$. A is about $1,372 cheaper if both finish on time — but schedule reliability, references and terms still matter.

12. Challenge Write three sentences describing how an owner can be both firm and fair with a contractor.

Show answer

Firm: everything is in writing — scope, price, schedule, draws and change orders — and nothing is paid until work is done, inspected and covered by lien waivers. Fair: when work passes, payment goes out promptly and in full, surprises are discussed honestly, and the owner does not keep changing the job. Kind: the owner keeps the site safe, communicates clearly and treats the crew with respect, so good workers want to come back.

COMMON MISTAKES

- Hiring the lowest bid without verifying the license and insurance on official sources.
- Paying a large share of the contract before work begins, or paying draws for work not yet completed and inspected.
- Approving change orders by conversation or text without a written price and signature.
- Paying contractors without collecting lien waivers from them and their major subcontractors and suppliers.
- Using the contingency for upgrades, or forgetting that delays add holding costs and interest to the all-in cost.
- Withholding or delaying payment for good work, or asking workers to skip permits or paperwork.

Make it a game · Draw Day. A parent writes ten "draw request" cards for a pretend rehab, each describing the work claimed and the evidence (photos, inspection card, lien waiver) — some complete, some missing an inspection, one asking for payment on work not started, one an honest request delayed by the owner. Players act as the owner: pay, hold or pay with a condition, and say why. Score a point for each decision that protects the owner and is fair to the worker; lose two for holding back pay on work that is done and documented.

Scripture. "Thou shalt not defraud thy neighbour, neither rob him: the wages of him that is hired shall not abide with thee all night until the morning." (Leviticus 19:13, KJV)

In ancient Israel a day laborer lived on each day's wage, so holding it back even overnight was a kind of robbery. A modern owner honors the same command by paying promptly for work that is done right, as the contract says, and by never using delay as a weapon. The same verse forbids defrauding — on either side of the contract.

6.4 The Refinance: Appraisals, Seasoning and Cash Left In

OBJECTIVES

- Compute every line of the BRRRR worksheet — all-in cost, cash in, refinance loan, cash out, cash left in, cash flow and cash-on-cash — by hand.
- Solve backward for the purchase price that allows a full cash-out refinance at a given ARV, LTV and set of costs.
- Explain how an appraiser values a renovated property from comparable sales, what an owner may and may not do to influence it, and what to do after a low appraisal.
- State common seasoning rules and LTV limits for cash-out refinances (Fannie Mae, as of 2026), including the delayed-financing exception, and why they exist.
- Measure the effect of a low appraisal, a longer hold and a higher refinance rate on cash left in the deal and DSCR.

> **Warm-up.** You spend $221,000 buying and fixing a house, and a lender will lend 75% of whatever an appraiser says it is worth. In five minutes, write the appraised value you would need to get all your money back, and list three things that could make the appraiser say less.

WATCH

How to Safely Refinance a Rental Property So That You Can Buy More

Coach Carson · 8:59

https://www.youtube.com/watch?v=CUNd7zr8llE

> **WHEN TO WATCH**
> Watch after the fourth core idea. Chad Carson explains how to pull cash out of rentals without endangering them; write down every safety test he uses and compare each with the DSCR and cash-flow results of your BRRRR worksheet.

BACKUP VIDEO

Cash Out Refinance For Beginners | BRRRR Method Deep Dive

FasterFreedom · 12:45

https://www.youtube.com/watch?v=7aj_srmWP2E

Watch on project day. The host walks through the refinance stage with a numbers example; pause at each figure and recompute it in the BRRRR worksheet, and note which of his assumptions (LTV, seasoning, rate) you would check with a lender's written terms.

KEY TERMS

after-repair value (ARV)

The estimated market value of a property after planned repairs, based on recent sales of comparable renovated properties.

cash-out refinance

A new loan larger than the existing debt, paying it off and returning the difference, less costs, to the borrower.

rate-and-term refinance

A refinance that pays off existing debt to change the rate or term, with little or no cash returned to the borrower.

seasoning

A lender's minimum time of ownership, or minimum age of the existing mortgage, before it will make a refinance based on the current appraised value.

delayed financing

A Fannie Mae exception allowing a cash-out refinance soon after a cash purchase, limited to the documented purchase investment plus closing costs of the new loan.

loan-to-value (LTV) limit

The maximum loan as a percentage of appraised value that a lender will make for a given property and loan type.

all-in cost

Everything spent to acquire and renovate a property before refinance: price, closing costs, rehab, holding costs, short-term interest and points.

cash left in the deal

The investor's cash in before refinance minus the cash returned by the refinance.

reconsideration of value

A formal request, made through the lender, that an appraiser review additional comparable sales or factual errors in an appraisal.

appraiser independence

The rule that no one with an interest in a loan may pressure or coerce an appraiser toward a value.

DSCR loan

An investment-property loan underwritten mainly on the property's debt service coverage ratio rather than the borrower's personal income; terms vary by lender.

CORE IDEAS

The story. Iowa State University has surveyed the value of Iowa farmland every year since 1941. In the 1970s, high crop prices and inflation pushed values up year after year, and many farmers borrowed against their land's rising appraised value to buy more land and equipment, expecting to refinance as values kept climbing. In 1981 the statewide average reached $2,147 an acre. Then interest rates soared, crop prices fell, and values turned. By 1986 the average had fallen to $787 an acre — down about 63% in five years. Loans that had been comfortably below the land's value now exceeded it; no lender would refinance them, and many families lost farms that had

been in their care for generations. The land was the same land, and the crops still grew. What changed was the appraised value — and every plan that depended on it.

How they figured it out. Lenders learned that a value created quickly can vanish quickly, and they wrote waiting periods — **seasoning** — into their rules. As of 2026, Fannie Mae's Selling Guide allows a cash-out refinance only if at least one borrower has been on title for six months, and if an existing first mortgage being paid off is at least twelve months old. Its **delayed-financing** exception lets a buyer who paid cash, with no mortgage, refinance within six months — but the new loan may be no more than the documented purchase investment plus the new loan's costs, so rehab money is not returned that way. FHA, as of 2026, will not insure a purchase of a home resold within 90 days of the seller's acquisition, and requires a second appraisal for some resales within 180 days. These rules exist because quick resales and refinances at inflated appraisals once cost lenders and borrowers dearly.

The big idea. The refinance is the step that makes BRRRR work — or not. You add up the **all-in cost**: price, closing costs, rehab, holding costs, short-term interest and points. You subtract any short-term loan to find your **cash in**. Then a new lender lends a percentage of the appraised **ARV**: $\text{refinance loan} = \text{ARV} \times \text{LTV}$. That loan pays off the short-term loan and the refinance closing costs, and anything left is **cash out**. Your **cash left in the deal** is cash in minus cash out. If it is zero or less, you have all your money back — but you also have a large new loan, and the property must still cash-flow on that loan. To get all your cash back, the all-in cost must be at or below the refinance loan minus its closing costs.

The appraisal decides everything, and the appraiser, not you, decides the value. A refinance appraisal is driven by recent sales of comparable renovated homes, adjusted for differences, as you learned in Lesson 2.4. You may help by giving the lender a clean packet — the scope of work, receipts, permits and final inspections, and sold comparables you believe are relevant — and by having the property finished, clean and rented. You may not pressure the appraiser, promise future business or suggest a number; appraiser independence rules forbid it. If the value comes in low, you can ask the lender for a **reconsideration of value** with better comparable sales or factual corrections, wait for more comparable sales, bring cash to close, keep the short-term loan longer at its high rate, or sell. Each choice has a cost; plan for one before you buy.

Know your lender's limits before you buy. As of 2026, Fannie Mae's eligibility matrix limits cash-out refinances of investment properties to 75% LTV for one unit and 70% for two to four units. Because a hard-money loan is an existing first mortgage, a conventional cash-out refinance generally must wait until it is twelve months old — a year of high interest — so many BRRRR investors refinance instead with a **DSCR loan** or a local portfolio lender whose seasoning, rates and fees differ (commonly six months or less, at higher rates; get each lender's terms in writing). Rates themselves can move between the day you buy and the day you refinance; a one-point rise can turn positive cash flow negative. A **rate-and-term refinance** that returns little cash is sometimes the wiser choice, because a smaller loan leaves more equity and more cash flow.

BRRRR's promise — "get all your money back and do it again" — is true only when everything goes right: a low enough price, an accurate rehab budget, a fast schedule, a strong appraisal, a lender who will refinance on time and rents that cover the new loan. Many careful investors are content to leave some cash in each deal, because a smaller loan means a higher DSCR, steadier cash flow and less risk if values fall. Remember the Iowa farmers: equity that exists only on an appraisal report is not money in the bank, and a loan sized to today's value must be repaid even if tomorrow's value is lower. Lesson 6.5 takes up the risks of repeating the process again and again.

Run the numbers. Open the **BRRRR** worksheet. Enter the price, buyer closing costs, rehab budget (with contingency), months until refinance and monthly holding costs; the percent of price and rehab the short-term lender finances, its rate and points; the ARV from renovated sold comps; the refinance LTV, rate, term and closing costs; and the rent and operating expenses as in the Rental worksheet. Read cash left in the deal, cash flow and cash-on-cash after refinance, DSCR on the new loan, and the full cash-out target. Then stress it: lower the ARV by 10%, add six months, raise the refinance rate one point. The classic mistakes: using the highest comp as the ARV; forgetting points, interest and holding costs; assuming a conventional cash-out at six months on a hard-money purchase; and celebrating "no money left in" when the new loan leaves negative cash flow.

PICTURE STUDY



Delano T. Smith's Highland Home Stock Farm, Marshall County, and Other Views, A. T. Andreas (publisher); Chas. Shober & Co., Chicago Lithographing Co. (engravers), 1875 · Lithograph, from the Illustrated Historical Atlas of the State of Iowa · David Rumsey Map Collection, Stanford University Libraries

Image: Wikimedia Commons, public domain

In 1875 the Chicago publisher Alfred T. Andreas produced a huge illustrated atlas of Iowa, with county maps and pages of engraved views of farms, homes and towns. Many of the views were of subscribers' own property, drawn from photographs and printed proudly beside the maps. This page shows Delano T. Smith's stock farm near Marshalltown, with his prize shorthorn cattle, together with a fine house in Cass County and a college in Linn County. It opens this lesson because it shows how owners have always presented the value they created — fences built, barns raised, herds improved — and because a hundred years later, Iowa's farmers learned how quickly the appraised value of such land could fall.

Look closely

- Look at the fences, barn and farmhouse. Improvements like these were how a farmer "forced" his land's value up, as a rehab does today.
- Find the row of named cattle at the bottom. The owner wanted readers to see his best assets, just as a seller lists a renovated kitchen.

- Notice the words “Engraved from photographs.” The publisher wanted the views to look factual, like comparables an appraiser can trust.
- Compare the mansion at the top with the working farm below. Two very different properties, each valued by what similar properties would bring.

Talk about it

1. If you were an appraiser in 1875, what would you compare this farm with to estimate its value?
2. Why might a farmer who borrowed against an improved farm in 1981 have been in trouble by 1986, even though his fences and barns were the same?
3. Proverbs warns that the hasty come to want. How might patience — waiting for seasoning, leaving cash in a deal, borrowing less — protect a family’s home or farm?

PROJECT

The Refinance Stress Test

You will take one real fixer listing through the BRRRR worksheet from purchase to refinance, then test what happens when the appraisal is low, the seasoning period is long and the refinance rate is higher. The goal is to know before buying how much cash could stay in the deal in a bad case. Purchases are pretend, and you contact no lender or appraiser.

You will need

- A real fixer listing and at least three sold comparables of renovated homes nearby
- Your line-item rehab budget method from Lesson 6.2
- The Deal Analyzer (BRRRR worksheet) and a spreadsheet
- Your deal binder

Steps

1. Estimate the ARV from three renovated sold comps, using the most similar, not the highest, and write a one-sentence justification.
2. Estimate the rehab with a contingency and choose example short-term financing terms (label them) and a realistic number of months.
3. Enter everything in the BRRRR worksheet and record all-in cost, cash in, refinance loan, cash out, cash left in, cash flow, cash-on-cash and DSCR.
4. Compute by hand the full cash-out target and the maximum purchase price for a full cash-out.
5. Run three stress cases: ARV 10% lower; refinance six months later; refinance rate one point higher. Record cash left in, cash flow and DSCR for each.
6. Write which stress case hurts most and what you would do if it happened (reconsideration of value, wait, bring cash, rate-and-term instead, or sell).
7. Print the base worksheet and your stress table, and write a verdict — buy, negotiate to a stated price, or walk away — for your deal binder.

INVESTOR'S NOTEBOOK

1. Make flashcards for ARV, cash-out refinance, rate-and-term refinance, seasoning, delayed financing, LTV limit, all-in cost, cash left in the deal, reconsideration of value, appraiser independence and DSCR loan.
2. Draw the BRRRR money flow as a diagram: cash in + short-term loan → all-in cost; refinance loan → pays short-term loan and closing → cash out → cash left in.
3. Write a trap list titled "Refinance Traps," ending with: THE APPRAISER SETS THE VALUE, AND THE NEW LOAN STILL HAS TO BE PAID.

KEY FORMULAS

$$\text{All-in cost} = \text{price} + \text{closing} + \text{rehab} + \text{holding} + \text{interest} + \text{points}$$

$$\text{Cash in} = \text{all-in cost} - \text{short-term loan}$$

$$\text{Refinance loan} = \text{ARV} \times \text{LTV}, \quad \text{cash out} = \text{refinance loan} - \text{payoff} - \text{refinance closing}$$

$$\text{Cash left in} = \text{cash in} - \text{cash out}, \quad \text{cash-on-cash} = \frac{\text{annual cash flow}}{\text{cash left in}}$$

$$\text{Full cash-out test: all-in cost} \le \text{ARV} \times \text{LTV} - \text{refinance closing}$$

From history. The Iowa land value survey began modestly in 1941 as a questionnaire mailed to people who knew local land markets, and it is now sent each year to about a thousand licensed real estate brokers and other knowledgeable people. Only its state and district averages come straight from the survey data; county figures are estimates. Its long record — booms, the 1980s collapse and later recoveries — is one of the best public lessons in how appraised values move.

Example 1. In this example, you buy a house for $160,000 with $4,000 of closing costs and a $40,000 rehab. A short-term lender finances 90% of the price and 100% of the rehab at 11% with 2 points; the rehab and lease-up take 6 months with $600 a month of holding costs. A DSCR lender (in this example, allowing refinance at six months) lends 75% of a $265,000 ARV at 7.25% for 30 years with $5,000 of closing costs. Rent is $2,400; taxes $2,600, insurance $1,300; vacancy 6%, repairs 6%, CapEx 7%, management 9%. Work the BRRRR worksheet.

Show solution

1. Short-term loan $0.90 \times \$160{,}000 + \$40{,}000 = \$184{,}000$; points $\$3{,}680$; interest $\$184{,}000 \times 0.11 \div 12 \times 6 = \$10{,}120$; holding $\$3{,}600$.
2. All-in $\$160{,}000 + \$4{,}000 + \$40{,}000 + \$3{,}600 + \$10{,}120 + \$3{,}680 = \$221{,}400$; cash in $\$221{,}400 - \$184{,}000 = \$37{,}400$.
3. Refinance loan $\$265{,}000 \times 0.75 = \$198{,}750$; cash out $\$198{,}750 - \$184{,}000 - \$5{,}000 = \$9{,}750$; cash left in $\$37{,}400 - \$9{,}750 = \$27{,}650$.
4. NOI $\$27{,}072 - \$10{,}080.48 = \$16{,}991.52$; P&I $\$1{,}355.83$ ($\$16{,}269.90$ a year); cash flow $\$721.62$ a year, about $\$60.13$ a month.
5. Cash-on-cash $\$721.62 \div \$27{,}650 \approx 2.6\%$; DSCR $\$16{,}991.52 \div \$16{,}269.90 \approx 1.04$; all-in as % of ARV 83.5%.

Answer: You leave $27,650 in the deal and earn about $60 a month — a 2.6% cash-on-cash return with a DSCR of 1.04. The house is a sound rental only if you accept a thin margin; it is not the “infinite return” BRRRR promises.

Example 2. Same ARV, LTV and refinance closing costs, but you pay cash: no short-term loan, $4,000 closing, $40,000 rehab, 6 months at $600 holding. What is the highest price that still gets all your cash back?

Show solution

1. Target: $\$265{,}000 \times 0.75 - \$5{,}000 = \$198{,}750 - \$5{,}000 = \$193{,}750$ maximum all-in cost.
2. Other costs: $\$4{,}000 + \$40{,}000 + 6 \times \$600 = \$47{,}600$.
3. Maximum price: $\$193{,}750 - \$47{,}600 = \$146{,}150$.
4. Check: all-in $\$146{,}150 + \$47{,}600 = \$193{,}750$; cash out $\$198{,}750 - \$0 - \$5{,}000 = \$193{,}750$; cash left in $\$0$.

Answer: About $146,150 — $13,850 below the $160,000 price in example 1. Note that a conventional delayed-financing refinance would cap the loan at the documented purchase investment plus costs, so this full cash-out assumes a lender whose rules allow it.

Example 3. Return to example 1. (a) The appraisal comes in at $240,000 instead of $265,000. (b) Instead, the appraisal is $265,000 but your lender requires 12 months of seasoning, so you keep the short-term loan 12 months with $600 holding each month. Find cash out and cash left in for each.

Show solution

1. (a) Loan $\$240{,}000 \times 0.75 = \$180{,}000$; cash out $\$180{,}000 - \$184{,}000 - \$5{,}000 = -\$9{,}000$ — you must bring $9,000 to close.
2. (a) Cash left in $\$37{,}400 - (-\$9{,}000) = \$46{,}400$. New P&I $1,227.92; cash flow $188.04 a month; DSCR 1.15.
3. (b) Interest $\$184{,}000 \times 0.11 = \$20{,}240$; holding $7,200; all-in $235,120; cash in $51,120.
4. (b) Cash out unchanged at $9,750; cash left in $\$51{,}120 - \$9{,}750 = \$41{,}370$.

Answer: A $25,000-lower appraisal raises cash left in from $27,650 to $46,400 (though the smaller loan improves cash flow), and six extra months of seasoning raises it to $41,370. Either surprise ties up far more cash — which is why careful investors test both before buying.

PRACTICE

1. Easy What is the difference between a cash-out and a rate-and-term refinance?

Show answer

A cash-out refinance borrows more than the existing debt and returns the difference to the borrower; a rate-and-term refinance replaces the debt to change rate or term with little or no cash returned.

2. Easy In this example, ARV is $220,000 and the LTV limit is 75%. What is the refinance loan?

Show answer

$\$220{,}000 \times 0.75 = \$165{,}000$.

3. Easy What may an owner give an appraiser through the lender, and what may he never do?

Show answer

He may provide factual information — scope of work, receipts, permits and relevant sold comps. He may never pressure, coerce or reward the appraiser or suggest a target value.

4. Medium In this example, all-in cost is $180,000 with a $150,000 short-term loan. The refinance loan is $172,500 and refinance closing is $4,500. Find cash in, cash out and cash left in.

Show answer

Cash in $\$180{,}000 - \$150{,}000 = \$30{,}000$; cash out $\$172{,}500 - \$150{,}000 - \$4{,}500 = \$18{,}000$; cash left in $\$30{,}000 - \$18{,}000 = \$12{,}000$.

5. Medium In problem 4, annual cash flow after refinance is $1,440. Find cash-on-cash.

Show answer

$\$1{,}440 \div \$12{,}000 = 12\%$.

6. Medium As of 2026, what seasoning does Fannie Mae require for a cash-out refinance that pays off an existing first mortgage?

Show answer

At least one borrower must have been on title at least six months, and the existing first mortgage being paid off must be at least twelve months old (note date to note date).

7. Medium In this example, ARV is $300,000, LTV 75% and refinance closing $6,000. What is the maximum all-in cost for a full cash-out?

Show answer

$\$300{,}000 \times 0.75 - \$6{,}000 = \$219{,}000.$

8. Hard In this example, a $150,000 hard-money loan at 12% must be carried 12 months instead of 6 because of seasoning. How much extra interest results, and how does it affect cash left in?

Show answer

Extra interest $\$150{,}000 \times 0.12 \div 12 \times 6 = \$9{,}000$; it raises the all-in cost and cash in by $9,000, so cash left in rises by $9,000 (plus any extra holding costs).

9. Hard In this example, the short-term payoff is $175,000, refinance closing $5,000 and the appraisal $230,000 at 75% LTV. Is there cash out or cash due at closing?

Show answer

Loan $\$230{,}000 \times 0.75 = \$172{,}500$; $\$172{,}500 - \$175{,}000 - \$5{,}000 = -\$7{,}500$ — the investor must bring $7,500 to close.

10. Hard Why can't a BRRRR investor who paid cash for the house but also spent $40,000 on rehab get that rehab money back through Fannie Mae's delayed-financing exception?

Show answer

As of 2026, delayed financing limits the new loan to the documented investment in purchasing the property plus the new loan's closing costs and points; rehab spending is not part of that limit, so it must wait for standard seasoning or another lender.

11. **Challenge** In this example, a refinance loan of $198,750 at 7.25% costs $1,355.83 a month and at 8.25% costs $1,493.14. NOI is $16,991.52. Find annual cash flow and DSCR at each rate.

    Show answer

    At 7.25%: debt $16,269.96 (rounded payment × 12), cash flow ≈ $721.56, DSCR ≈ 1.04. At 8.25%: debt $17,917.68, cash flow ≈ −$926.16, DSCR ≈ 0.95. One point of rate turns a small profit into a loss.

12. **Challenge** Write three sentences advising a friend whose BRRRR appraisal came in $25,000 low.

    Show answer

    First, ask the lender for a reconsideration of value only if you have better renovated comps or factual errors to show — never pressure the appraiser. Then compare the real costs of each option: bringing cash to close, waiting for more sales while paying short-term interest, a smaller rate-and-term refinance, or selling. Choose the path that keeps the property safely cash-flowing, even if more of your money stays in the deal for now.

COMMON MISTAKES

- Using the highest comparable sale as the ARV instead of the most similar renovated comps.
- Leaving points, short-term interest and holding costs out of the all-in cost.
- Assuming a conventional cash-out refinance at six months after a hard-money purchase, when the existing mortgage must generally be twelve months old (Fannie Mae, as of 2026).
- Pressuring an appraiser or suggesting a value instead of providing facts through the lender.
- Celebrating “no money left in” when the new loan leaves negative cash flow or a DSCR below 1.
- Ignoring rate risk between purchase and refinance.

Make it a game · Appraisal Roulette. Each player builds a pretend BRRRR on a card: price, rehab, months and a short-term loan (use the lesson's example as a template). A parent rolls two dice for the appraisal: 2–4 means ARV 15% below plan, 5–6 means 5% below, 7–9 means on plan, 10–12 means 5% above. Roll one die for seasoning: 1–2 adds six months. Players compute cash left in and monthly cash flow. After four rounds, the player with the most cash flow and least cash stranded wins — usually the one who paid the lowest price.

Scripture. "The thoughts of the diligent tend only to plenteousness; but of every one that is hasty only to want." (Proverbs 21:5, KJV)

The diligent plan carefully and wait; the hasty grab and come to want. A refinance rewards diligence — accurate comps, a realistic rehab, patience through seasoning — and punishes haste: the inflated ARV, the rushed appraisal, the loan sized to a hope. Plenty that lasts comes from careful thought, not hurry.

6.5 Repeat? The Risks of BRRRR

OBJECTIVES

- Explain how repeating BRRRR compounds debt, and how leverage multiplies a fall in value into a much larger fall in equity.
- Stress-test a small portfolio of refinanced rentals for lower rents, higher vacancy and a large repair, and size the reserves it needs.
- Compute the effect of a higher refinance rate on cash flow and DSCR.
- Describe lender limits on multiple financed properties and reserve requirements (Fannie Mae, as of 2026).
- Write a disciplined BRRRR checklist and decide, with reasons, when to slow down, pay down debt or stop.

> **Warm-up.** An investor owns three rentals, each worth $260,000 with a $195,000 loan. In five minutes, compute her total equity. Then imagine values fall 15% in a recession and a tenant stops paying. Write how her equity changes and what bills still come due every month.

WATCH

How to Fail at The BRRRR Method | 4 Steps to Avoid

BiggerPockets · 22:27

https://www.youtube.com/watch?v=a1HAJuDroeQ

> **WHEN TO WATCH**
> Watch after the third core idea. The host explains four ways BRRRR deals fail — overspending on finishes, low appraisals and weak cash flow among them; for each, write which BRRRR worksheet input it changes and which item on your checklist would catch it.

BACKUP VIDEO

Why Rental Investors Abandoned the BRRRR Strategy in 2025

Coach Carson · 17:54

https://www.youtube.com/watch?v=HjIJJm_hPEA

Watch on project day. Chad Carson explains why higher rates made many BRRRR deals stop working and how investors adjusted; list each adjustment and test one of them in your three-property portfolio.

KEY TERMS

leverage

The use of borrowed money to control an asset, which magnifies both gains and losses on the owner's equity.

over-leverage

Borrowing so much against a property or portfolio that ordinary setbacks — vacancy, repairs, lower values or higher rates — can produce losses the owner cannot cover.

equity

Property value minus the debt against it; the owner's stake, which shrinks first when values fall.

reserves

Cash set aside to cover vacancies, repairs, capital expenditures and loan payments when income falls short.

negative cash flow

A property's income failing to cover operating expenses and debt service, so the owner must add cash each month.

portfolio stress test

Recomputing every property's cash flow under bad but plausible conditions at the same time, and adding the results.

cross-default risk

The danger that trouble on one property drains the cash needed to keep others current, spreading a single problem through a portfolio.

financed properties limit

A lender's cap on how many mortgaged properties a borrower may own and still qualify; Fannie Mae's is ten under its automated underwriting, as of 2026.

debt paydown

Using cash flow or savings to reduce loan balances, lowering risk and raising cash flow over time.

velocity of capital

Investor's phrase for reusing the same cash in deal after deal by pulling it out through refinancing.

CORE IDEAS

The story. In the 1950s William Zeckendorf was the most daring real estate developer in America. His company, Webb & Knapp, bought and built across the country — office towers, shopping centers, apartment projects, whole urban-renewal districts — using as little of its own cash as possible and as much borrowed money as lenders would supply. When income lagged, he borrowed again, at ever higher rates; he is

often quoted as saying he would rather be alive at 18% than dead at the prime rate. But Webb & Knapp lost money every year after 1959, and in May 1965 creditors forced it into bankruptcy. The trustee found about $21.5 million of assets against about $60 million of liabilities. Zeckendorf lost control of the company, his portfolio and much of his personal fortune. The buildings he had dreamed up mostly still stand; the debt he used to repeat deal after deal is what ruined him.

How they figured it out. Lenders learned that a borrower with many mortgaged properties carries a risk that no single property shows: one bad year on several houses at once. So they built limits and cushions into their rules. As of 2026, Fannie Mae allows a borrower to have at most ten financed properties when buying a second home or investment property through its automated underwriting, and it requires extra reserves for other financed properties — 2% of their total unpaid loan balances for one to four financed properties, 4% for five or six, and 6% for seven to ten — on top of reserves for the new loan. Commercial lenders demand DSCR minimums and personal guarantees. These rules do not make a portfolio safe; they are the minimum the lending industry learned to require after watching over-leveraged owners fail.

The big idea. BRRRR's fifth R — **repeat** — is where its risk compounds. Each successful refinance pulls cash out by adding debt, and that cash buys the next property, which adds more debt. After a few rounds, an investor may own several houses with high loan-to-value ratios, thin cash flow and little cash left anywhere. That is **leverage** working at full strength: in this example three houses worth $775,000 with $581,250 of loans carry $193,750 of equity; a 15% fall in values cuts equity to $77,500 — a 60% loss — while every loan payment stays the same. **Over-leverage** is not a moral failure; it is a math failure, and it is fixed by the same math: lower loan balances, more reserves and fewer, better deals.

The common ways BRRRR goes wrong are known in advance. Rehabs run over budget and over schedule, raising the all-in cost. Appraisals come in low, leaving more cash stranded. Rates rise between purchase and refinance, so the new payment eats the cash flow. Rents come in lower than the pro forma, or the market softens. A large repair — a roof, a sewer line, a furnace — arrives in the first year. Each by itself is survivable with reserves. Together, across several properties at once, they can turn a portfolio that looked fine on paper into one that consumes the owner's paycheck — the **cross-default risk** of a highly leveraged portfolio. The 2008

housing crash taught this to a generation: many owners had equity on paper, but when values fell and credit tightened, they could neither refinance nor sell for enough to pay off their loans.

A disciplined BRRRR investor writes rules before the next deal and keeps them. Common examples: buy only when the all-in cost is at or below a set share of conservative ARV (many use 75% or less); require positive cash flow and a DSCR of at least 1.2 at the refinance rate plus one point; keep reserves of at least six months of each property's expenses and payments, plus a separate CapEx fund; never refinance to the maximum just because a lender allows it; never use a short-term loan without a backup plan if the refinance fails; and pause buying whenever reserves fall below target. Some investors deliberately leave cash in deals or choose rate-and-term refinances to keep loans smaller. Others, following the counsel of Dave Ramsey and many careful families, decide to stop borrowing altogether and pay properties off.

There is a time to slow down, pay down or stop. Signs include: reserves shrinking, any property with negative cash flow, a DSCR near 1, a balloon or rate reset approaching, more work than the family can carry, or a market where prices have outrun rents. Paying down debt raises cash flow, lowers risk and lets a family sleep; growing with leverage can build a larger portfolio faster, with more ways to fail. This course presents both paths honestly and leaves the choice to each family — but it insists on one thing: no plan is sound if it depends on everything going right. The goal of the course is not the most doors; it is enough income from properties you can keep through bad years, managed well, serving your tenants and your family.

Run the numbers. Run the **BRRRR** worksheet for each property, then build a portfolio stress table in a spreadsheet: for every property list NOI and debt service, then recompute with rent 10% lower, vacancy 5 points higher and the refinance rate one point higher (the Rental worksheet's "What if?" table does this property by property). Add one large repair to one property. Total the annual cash flow for each case and compare it with your reserves and with the lender's reserve rule. The classic mistakes: stress-testing each property alone instead of all at once; counting equity as safety when it cannot be reached without selling; refinancing every property to the maximum; buying the next property with the reserve fund; and assuming rents and values will rise to fix the numbers. If the stress case requires money you do not have, the portfolio is too leveraged for you.

PICTURE STUDY



The Course of Empire: Desolation, Thomas Cole, 1836 · Oil on canvas · New-York Historical Society, New York

Image: Wikimedia Commons, public domain

Thomas Cole, founder of the Hudson River School of American landscape painting, painted *The Course of Empire* as a series of five pictures between 1833 and 1836. The same harbor appears in each: wild land, a peaceful farming country, a magnificent city at its height, its destruction, and finally this last scene — desolation, with nature reclaiming the stones. Cole meant the series as a warning about pride and overreach. It closes this unit because every investor who repeats deal after deal is building a small empire, and its foundation is either sound or borrowed. Cole's column still stands, but no one is left to use it.

Look closely

- Find the bird's nest on top of the column. Life goes on in the ruins; the land outlasts every builder's ambition.
- Look at the broken bridge. Something built to carry traffic now carries nothing — like a property that cannot carry its debt.
- Notice the calm water and soft moonlight. Cole paints the end not with violence but with stillness.
- Compare the scale of the ruins with the empty shore. Great works need people, income and care to stay alive.

Talk about it

1. What do you think the earlier, prosperous city in Cole's series did that led to this end? What is the investing version of that mistake?
2. Which rule on your disciplined BRRRR checklist would most protect a growing portfolio from becoming a ruin?
3. Proverbs 28:20 says the faithful man abounds with blessings but the one who hastens to be rich is not innocent. How can an investor tell the difference between diligent growth and hasting to be rich?

PROJECT

The Three-Property Stress Test

You will build a pretend portfolio of three BRRRR rentals from real listings you analyzed in this unit (or new ones), refinance them on paper, and stress-test them together. Then you will write your own disciplined BRRRR rules and decide what your portfolio should do next: grow, hold, pay down or sell.

You will need

- Three real listings with BRRRR worksheets from this unit or new ones
- A spreadsheet for the portfolio table
- The Deal Analyzer (BRRRR and Rental worksheets) and a calculator
- Your deal binder

Steps

1. Enter each property in the BRRRR worksheet with conservative ARV, rehab and refinance terms; record NOI, debt service, cash flow, DSCR, loan and value.
2. Build a portfolio table with totals: value, loans, equity, LTV and annual cash flow.
3. Stress the whole portfolio at once: rent −10%, vacancy +5 points, refinance rate +1 point and one $9,000 repair; total the cash flow.
4. Compute equity and LTV after a 15% fall in values.
5. Compute Fannie Mae's other-property reserve (2% of total loans) and your own reserve target of six months of each property's expenses and payments; compare both with the stress-year shortfall.
6. Write ten rules for your own disciplined BRRRR checklist, including when you would stop buying and start paying down debt.
7. Print the worksheets and table and write a one-page decision memo — grow, hold, pay down or sell — for your deal binder, defending it with the numbers.

INVESTOR'S NOTEBOOK

1. Make flashcards for leverage, over-leverage, equity, reserves, negative cash flow, portfolio stress test, cross-default risk, financed properties limit, debt paydown and velocity of capital.
2. Draw two bar charts side by side — equity before and after a 15% value drop — and label the 60% loss.
3. Write a trap list titled "Repeat Traps," ending with: NO PLAN IS SOUND IF IT NEEDS EVERYTHING TO GO RIGHT.

KEY FORMULAS

$$\text{Equity} = \text{value} - \text{loan balance}, \quad \%\Delta\text{equity} = \frac{\text{new equity} - \text{old equity}}{\text{old equity}}$$

$$\text{Portfolio cash flow} = \sum_i (\text{NOI}_i - \text{debt service}_i)$$

$$\text{Fannie Mae other-property reserves} = r \times \text{total unpaid balance}, \quad r = 2\%,\ 4\% \text{ or } 6\%$$

$$\text{DSCR} = \frac{\text{NOI}}{\text{annual debt service}}$$

From history. Zeckendorf's boldest deal came before his fall. In 1946 he had quietly assembled a large stretch of slaughterhouses and riverfront land on Manhattan's East Side, and when the new United Nations was searching for a home, John D. Rockefeller Jr. bought the site for $8.5 million and gave it to the UN. The deal made Zeckendorf famous. The same appetite for great deals, financed with ever more debt, brought down his company less than twenty years later.

Example 1. In this example, an investor owns three refinanced BRRRR rentals, each financed at 75% of ARV for 30 years: A (ARV $265,000 at 7.25%, rent $2,400, taxes $2,600, insurance $1,300), B ($230,000 at 7.5%, rent $2,100, taxes $2,300, insurance $1,200) and C ($280,000 at 7%, rent $2,500, taxes $3,000, insurance $1,400). Each uses 6% vacancy, 6% repairs, 7% CapEx and 9% management. Stress-test the portfolio: rent 10% lower and vacancy 11% at the same time, plus a $9,000 roof on B.

Show solution

1. Base cash flow (NOI − debt service): A $\$16{,}991.52 - \$16{,}269.90 = \$721.62$; B $\$14{,}780.08 - \$14{,}473.74 = \$306.34$; C $\$17{,}362.00 - \$16{,}765.62 = \$596.38$; total $1,624.34 a year (rounded per property).
2. Stress NOI (rent −10%, vacancy 11%): A $13,723.01, B $11,920.13, C $13,957.30.
3. Stress cash flow: A −$2,546.89, B −$2,553.61, C −$2,808.32; total −$7,908.82.
4. Add the roof: $-\$7{,}908.82 - \$9{,}000 = -\$16{,}908.82$ for the year.

Answer: A portfolio earning about $1,624 a year in good times would need about $16,900 of cash in a bad year. Fannie Mae's 2% rule on $581,250 of loans ($11,625) would not cover it; six months of expenses and payments per property would. Thin margins times three is still thin.

Example 2. Same three properties: total value $775,000, total loans $581,250. Values fall 15%. Find equity before and after, the percent change in equity and the new loan-to-value.

Show solution

1. Equity before: $\$775{,}000 - \$581{,}250 = \$193{,}750$.
2. New value: $\$775{,}000 \times 0.85 = \$658{,}750$; equity after $\$658{,}750 - \$581{,}250 = \$77{,}500$.
3. Change: $\dfrac{\$77{,}500 - \$193{,}750}{\$193{,}750} = -60\%$.
4. New LTV: $\$581{,}250 \div \$658{,}750 \approx 88.2\%$ — far above the 75% a cash-out lender would allow.

Answer: A 15% fall in values erases 60% of the equity, and at 88% LTV the investor can no longer refinance to pull cash and would likely lose money selling after commissions. Leverage multiplies losses as surely as gains.

Example 3. Property A's refinance loan is $198,750. At 7.25% the monthly P&I is $1,355.83; if rates rise before the refinance closes, the investor gets 8.25% instead ($1,493.14). With NOI of $16,991.52, compare annual cash flow and DSCR.

Show solution

1. At 7.25%: debt service $\$1{,}355.83 \times 12 = \$16{,}269.96$; cash flow $\$16{,}991.52 - \$16{,}269.96 = \$721.56$; DSCR 1.04.
2. At 8.25%: debt service $\$1{,}493.14 \times 12 = \$17{,}917.68$; cash flow $\$16{,}991.52 - \$17{,}917.68 = -\$926.16$; DSCR 0.95.
3. Change: $\$721.56 - (-\$926.16) = \$1{,}647.72$ a year less, about $137 a month.

Answer: One point of rate turns $722 of annual cash flow into a $926 loss. A disciplined investor underwrites the refinance at a rate one point higher than today's and buys only if it still works.

PRACTICE

1. Easy What does the fifth R in BRRRR mean, and why is it risky?

Show answer

Repeat — using cash pulled out by refinancing to buy the next property. Each round adds debt, so a portfolio built this way can become highly leveraged with thin cash flow.

2. Easy In this example, a house is worth $250,000 with a $187,500 loan. What is the equity and the LTV?

Show answer

Equity $62,500; LTV $\$187{,}500 \div \$250{,}000 = 75\%$.

3. Easy As of 2026, what is Fannie Mae's maximum number of financed properties for a borrower buying an investment property through its automated underwriting?

Show answer

Ten financed properties.

4. Medium In problem 2, the value falls 20%. Find the new equity and the percent change in equity.

Show answer

New value $200,000; equity $\$200{,}000 - \$187{,}500 = \$12{,}500$; change $(\$12{,}500 - \$62{,}500) \div \$62{,}500 = -80\%$.

5. Medium In this example, a borrower's other financed properties carry $640,000 of loans and she will have five financed properties. What other-property reserves does Fannie Mae require (as of 2026)?

Show answer

Five or six financed properties require 4%: $0.04 \times \$640{,}000 = \$25{,}600$.

6. Medium In this example, three properties have annual cash flows of $1,200, −$600 and $900. What is portfolio cash flow, and what does the negative property mean?

Show answer

$\$1{,}200 - \$600 + \$900 = \$1{,}500$. The negative property is being fed by the others; a bad year elsewhere could leave nothing to cover it.

7. Medium In this example, a property's NOI is $15,000 and its debt service $13,500. What is the DSCR, and does it meet a 1.2 rule?

Show answer

$15,000 ÷ $13,500 ≈ 1.11 — below 1.2, so it fails a disciplined investor's rule.

8. Hard In this example, a portfolio's monthly operating expenses and payments total $7,800 across four properties. How much would a six-month reserve be, and how does it compare with a 2% reserve on $720,000 of loans?

Show answer

Six months: $6 \times \$7{,}800 = \$46{,}800$. 2% rule: $0.02 \times \$720{,}000 = \$14{,}400$. The lender's minimum is less than a third of a cautious family's target.

9. Hard In this example, a loan payment rises from $1,400 to $1,560 a month at refinance. NOI is $18,000. Find the DSCR before and after.

Show answer

Before $18,000 ÷ $16,800 ≈ 1.07; after $18,000 ÷ $18,720 ≈ 0.96.

10. Hard Explain why equity is not the same as safety for an over-leveraged investor.

Show answer

Equity can be reached only by selling (paying 6–8% costs) or refinancing (which requires lender approval, appraisal and DSCR), and both may be impossible exactly when cash is needed — in a downturn. Cash reserves and positive cash flow are what pay bills in a bad year.

11. Challenge In this example, an investor's four properties each produce $50 a month in normal times. In a stress year each loses $250 a month and one needs a $12,000 repair. What is the year's shortfall, and how many months of normal cash flow would it take to earn it back?

Show answer

Shortfall $4 \times \$250 \times 12 + \$12{,}000 = \$24{,}000$. Normal cash flow $4 \times \$50 = \$200$ a month, so $\$24{,}000 ÷ \$200 = 120$ months — ten years.

12. **Challenge** Write three disciplined BRRRR rules you would adopt and one sign that would make you stop buying.

Show answer

Sample: I buy only when all-in cost is 75% of a conservative ARV or less; every property must cash-flow with a DSCR of at least 1.2 at the refinance rate plus one point; I keep six months of expenses and payments in reserve for each property and never spend it on a down payment. I will stop buying and pay down debt whenever any property has negative cash flow or my reserves fall below target.

COMMON MISTAKES

- Stress-testing each property alone instead of the whole portfolio at once.
- Counting equity as safety, when it can be reached only by selling or refinancing — often impossible in a downturn.
- Refinancing every property to the maximum LTV just because a lender allows it.
- Using reserves as the down payment on the next deal.
- Assuming rising rents and values will fix thin or negative cash flow.
- Underwriting the refinance at today's rate instead of a higher one.

Make it a game · The Bad-Year Draw. Each player starts with three pretend rentals (cards showing monthly cash flow, such as $60, $25 and $50) and a reserve of $10,000 in play money. Shuffle a deck of "year" cards: rent −10% (each property loses $200 a month), vacancy (one property loses three months of rent), new roof $9,000, rate reset ($140 a month more on one property), and quiet year. Draw two per year for three years, paying shortfalls from reserves. A player who runs out of reserves must sell a property at a 10% loss. The player with the most equity and reserves left wins — usually the one who started with the smallest loans.

Scripture. "A faithful man shall abound with blessings: but he that maketh haste to be rich shall not be innocent." (Proverbs 28:20, KJV)

Solomon does not condemn wealth; he condemns haste. The faithful man works patiently and keeps his word, and blessings follow; the man hurrying to be rich cuts corners and takes risks that harm others. Repeating BRRRR too fast is haste made of debt — and lenders, tenants and family all pay when it fails.

UNIT 6

BRRRR and Value-Add

Buy, rehab, rent, refinance, repeat: **BRRRR** is the best-known way small investors try to recycle the same cash through property after property. This unit teaches each step as a careful practitioner would. You will find deals on and off the market — through the **MLS**, keyword searches, auctions and honest, kind **off-market outreach** — and check a **wholesaler**'s numbers against your own. You will walk a property with a checklist, write a **scope of work** and build a line-item rehab budget with a **contingency**, including the EPA lead rules for older homes. You will compare bids, write a **draw schedule**, collect **lien waivers** and pay workers promptly and fairly.

Then you will work the **refinance** line by line in the Deal Analyzer's BRRRR worksheet — all-in cost, cash out and **cash left in the deal** — and learn the appraisal, **seasoning** and LTV rules (as of 2026) that decide it. Finally you will ask the hard question in the unit's last lesson: should you repeat? The stories — a bridge built with bad wire, a White House hollowed out, Iowa farmland that lost nearly two-thirds of its value, a developer ruined by debt — all teach one thing: plans that need everything to go right eventually fail. Learn BRRRR's math so well that you can see when not to do it.

PREREQUISITES

- Can compute NOI, cash flow, cash-on-cash and DSCR, and has used the Rental worksheet's stress test (Unit 3)
- Can estimate after-repair value from adjusted sold comparables (Lesson 2.4)
- Can explain hard-money loans, points, cash-out refinances and loan-to-value (Unit 4)
- Has completed the Unit 5 deal binder section, including at least one property analyzed in two worksheets

MASTERY CHECKLIST

- ☐ I can search for value-add listings, screen them with the 70% rule and track a deal funnel with realistic ratios.
- ☐ I can write off-market outreach that is honest, kind and lawful, and check a wholesaler's ARV and rehab figures against my own.
- ☐ I can walk a property with a checklist, write a scope of work by room and system, and price a line-item rehab budget with a contingency.
- ☐ I can decide when the EPA RRP rule applies to work on a pre-1978 home and what it requires.
- ☐ I can compare contractor bids, build a draw schedule tied to inspected work, and explain lien waivers and change orders.
- ☐ I can compute every line of the BRRRR worksheet by hand, including cash out and cash left in the deal, and solve for a full cash-out purchase price.
- ☐ I can explain appraisal, seasoning and LTV rules for refinances (as of 2026) and measure the effect of a low appraisal or a longer hold.
- ☐ I can stress-test a small portfolio of refinanced rentals and write disciplined rules for when to grow, hold or pay down debt.

OPTIONAL BOOKS AND RESOURCES FOR THIS UNIT

- **School Launch Deal Analyzer**: Free. The BRRRR worksheet computes all-in cost, cash in, refinance loan, cash out, cash left in the deal, cash flow, DSCR and the full cash-out target; the Fix & flip and Rental worksheets support Lessons 6.1–6.3. Used in every lesson of this unit. Ages 14 and up.
- **David Greene, Buy, Rehab, Rent, Refinance, Repeat (BiggerPockets Publishing)**: A printed book that walks through each step of the BRRRR method from a practitioner's view. Read it with Lessons 6.4 and 6.5, and check its examples in the BRRRR worksheet with today's rates, since its numbers reflect the years it was written. Ages 15 and up.
- **J Scott, The Book on Estimating Rehab Costs (BiggerPockets Publishing)**: A printed guide to walking a property, writing a scope of work and pricing a rehab line by line. Use it with Lessons 6.2 and 6.3 as a model for your own budget spreadsheet. Ages 15 and up.
- **EPA: Lead Renovation, Repair and Painting Program**: Free, official. The Environmental Protection Agency's explanation of the RRP rule for work that disturbs paint in pre-1978 homes, including what landlords and contractors must do. Read it with Lesson 6.2 before budgeting any work on an older house. Ages 14 and up.
- **Fannie Mae Selling Guide: Cash-Out Refinance Transactions (B2-1.3-03)**: Free, official. The rule page lenders follow for conventional cash-out refinances, including title seasoning, the twelve-month rule for existing mortgages and delayed financing. Use it with Lesson 6.4 and note the page date, since the rules change. Ages 15 and up.

Not required. Every project in this unit works without them. School Launch has no ties to these authors, publishers or companies.

LESSONS IN THIS UNIT

6.1 Finding Deals: On-Market, Off-Market and Honest Outreach
3 sessions of 50 minutes

6.2 Scoping and Estimating the Rehab 3 sessions of 50 minutes

6.3 Managing Contractors, Permits and the Budget 3 sessions of 50 minutes

6.4 The Refinance: Appraisals, Seasoning and Cash Left In 3 sessions of 50 minutes

Unit 6 test

Closed notes, basic calculator. Twenty four-choice questions, 5 points each, 100 points total. Allow about two minutes per question — set a timer for 40 minutes. Show the arithmetic for every calculation question on scratch paper, and choose the one best answer. Aim for 80% or better, and rework every miss. Figures marked “in this example” are examples; real rates, prices, costs and loan rules vary by place, lender and year.

1. **5 pts**

   In this example, a fixer’s ARV is $250,000 and the rehab will cost $40,000. What is the 70% rule maximum offer?

   A. $175,000

   B. $135,000

   C. $210,000

   D. $147,000

2. **5 pts**

   Which outreach letter follows this course’s honesty standard?

   A. “URGENT: Final notice regarding your property. Respond within 48 hours.”

   B. “Our young family has fallen in love with your house!” — sent by a wholesaler who will assign the contract

   C. A handwritten-looking “note from a neighbor” that is really mass mail

   D. A letter giving the sender’s real name and role as an investor, offering a fair written offer, inviting the owner to seek advice and promising to stop on request

3. 5 pts

As of 2026, Oklahoma's Predatory Real Estate Wholesaler Prohibition Act (effective November 1, 2021) does what?

A. Requires a real estate license to publicly market an equitable interest in a purchase contract

B. Bans all real estate investing by unlicensed persons

C. Requires wholesalers to buy every property they contract

D. Applies only to commercial buildings

4. 5 pts

Which statement about REO properties is most accurate?

A. They are sold by the original owner at full retail price

B. Buyers at REO sales cannot use financing

C. They are lender-owned after foreclosure and usually sold as is, often with addenda that shift risk to the buyer

D. They come with a lender's warranty of condition

5. 5 pts

In this example, an investor wants three purchases a year. About 1 in 8 properties she analyzes earns an offer, and 1 in 10 offers is accepted. How many offers and analyses does she need?

A. 30 offers and 240 analyses

B. 24 offers and 30 analyses

C. 10 offers and 80 analyses

D. 3 offers and 24 analyses

6. 5 pts

In this example, rehab line items total $42,000 and the investor adds a 15% contingency. What is the rehab budget?

A. $42,000

B. $35,700

C. $48,300

D. $57,000

7. 5 pts

A landlord hires a contractor to replace four windows in her 1965 rental. Under the EPA RRP rule:

A. The rule does not apply because windows are small

B. The rule applies only if children live there

C. The rule applies only to homeowners, not landlords

D. The work is covered; she must use a lead-safe certified firm following lead-safe practices

8. 5 pts

Why is a price-per-square-foot estimate not enough for a final rehab budget?

A. It is always too high

B. It cannot see specific big-ticket problems such as a failing roof, sewer line or electrical panel

C. Lenders forbid it

D. It includes too much contingency

9. 5 pts

Which payment plan best protects an owner on a $50,000 rehab contract?

A. 50% at signing and 50% at the end

B. Full payment in cash for a discount

C. A small deposit, then draws for completed and inspected stages, with a final payment after the punch list and final lien waivers

D. Weekly payments regardless of progress

10. 5 pts

An owner paid her general contractor in full, but the contractor did not pay the electrician. Which document, collected with each payment, would have best protected her property from the electrician's claim?

A. A lien waiver from the electrician

B. A certificate of occupancy

C. A change order

D. The building permit

11. 5 pts

In this example, a $200,000 short-term loan at 12% runs two months longer than planned. How much extra interest results?

A. $24,000

B. $2,000

C. $12,000

D. $4,000

12. 5 pts

A change order should be:

A. Agreed by text after the work is done

B. Written, priced and signed by both parties before the changed work begins

C. Avoided by never changing anything, even safety items the inspector requires

D. Paid from the next draw without documentation

13. 5 pts

In this example, a BRRRR's all-in cost is $210,000, the short-term loan is $175,000, the ARV is $250,000, the refinance LTV is 75% and refinance closing is $5,000. How much cash is left in the deal?

A. $27,500

B. $35,000

C. $7,500

D. $22,500

14. 5 pts

In this example, ARV is $280,000, the refinance LTV 75% and refinance closing $6,000. For a full cash-out, the all-in cost may be at most:

A. $210,000

B. $196,000

C. $204,000

D. $216,000

15. 5 pts

As of 2026, Fannie Mae requires which seasoning for a cash-out refinance that pays off an existing first mortgage?

A. None, if the appraisal is high enough

B. At least one borrower on title six months, and the existing first mortgage at least twelve months old

C. Five years of ownership

D. Thirty days on title

16. 5 pts

Before a refinance appraisal, which action by the owner is proper?

A. Telling the appraiser the value needed to make the deal work

B. Promising the appraiser future business for a strong number

C. Calling the appraiser repeatedly after a low value to demand a change

D. Giving the lender a packet with the scope of work, receipts, permits and relevant sold comps

17. 5 pts

In this example, the short-term payoff is $180,000, refinance closing is $5,000, and the appraisal comes in at $230,000 with a 75% LTV. At closing the investor will:

A. Receive $12,500

B. Need to bring about $12,500

C. Receive $172,500

D. Owe nothing

18. 5 pts

In this example, a portfolio worth $600,000 has $450,000 of loans. If values fall 10%, equity changes by:

A. −10%

B. −25%

C. −40%

D. −60%

19. 5 pts

As of 2026, for a borrower with one to four other financed properties, Fannie Mae requires additional reserves equal to:

A. 2% of the total unpaid balance of those loans

B. 6 months of rent

C. 25% of the new loan

D. Nothing

20. 5 pts

Which of these is the clearest sign that a BRRRR investor should stop buying and pay down debt?

A. A new listing has a great kitchen

B. A lender has approved a higher LTV

C. Rents in the area rose 2% last year

D. Reserves have fallen below target and one property has negative cash flow

ANSWER KEY

1. B. $\$250{,}000 \times 0.70 - \$40{,}000 = \$175{,}000 - \$40{,}000 = \$135{,}000$. A forgets to subtract the rehab.
2. D. Honest outreach states who you are, uses no false urgency or disguises, invites independent advice and honors "no." A imitates official notices; B and C deceive.
3. A. The act brought the core of wholesaling — publicly marketing an interest in another's purchase contract — under the license law. It does not ban investing generally (B).
4. C. REO means real estate owned by a lender after foreclosure. Unlike many foreclosure auctions, REO purchases can usually be inspected and financed (so B is wrong), but they are sold as is.
5. A. Offers $3 \div 0.10 = 30$; analyses $30 \times 8 = 240$. D assumes every offer is accepted.
6. C. $\$42{,}000 \times 1.15 = \$48{,}300$. B subtracts the contingency instead of adding it.
7. D. The home was built before 1978, the work is paid, and window replacement is always covered regardless of size; the rule applies to landlords' rentals.
8. B. A shortcut is a screen. In the lesson's example, a $30-per-square-foot estimate missed about $19,600 of roof, exterior and electrical work that a line-item scope found.
9. C. A draw schedule pays only for completed, inspected work and keeps leverage for the punch list. A and B pay far ahead of work done.
10. A. Under state mechanics' lien laws an unpaid sub may claim a lien on the property; a lien waiver from that sub for amounts paid releases the claim.
11. D. $\$200{,}000 \times 0.12 \div 12 \times 2 = \$4{,}000$. A is a full year's interest.
12. B. Written, priced and signed in advance. Required safety work (C) must be done; the point is to document it before doing it.
13. A. Cash in $\$210{,}000 - \$175{,}000 = \$35{,}000$; loan $187,500; cash out $\$187{,}500 - \$175{,}000 - \$5{,}000 = \$7{,}500$; left in $\$35{,}000 - \$7{,}500 = \$27{,}500$. C is the cash out, not the cash left in.
14. C. $\$280{,}000 \times 0.75 - \$6{,}000 = \$210{,}000 - \$6{,}000 = \$204{,}000$. A forgets the closing costs.
15. B. Selling Guide B2-1.3-03 sets both tests. That is why many BRRRR investors refinancing hard-money loans use DSCR or portfolio lenders with different

terms.

16. D. Owners may provide facts; appraiser independence rules forbid pressure, coercion or suggested values. After a low value, the proper step is a reconsideration of value through the lender.
17. B. Loan $\$230{,}000 \times 0.75 = \$172{,}500$; $\$172{,}500 - \$180{,}000 - \$5{,}000 = -\$12{,}500$, so she must bring $12,500 to close.
18. C. Equity before $150,000; after $\$540{,}000 - \$450{,}000 = \$90{,}000$; change $-\$60{,}000 \div \$150{,}000 = -40\%$. Leverage turns a 10% value drop into a 40% equity loss.
19. A. Two percent for one to four financed properties, 4% for five or six, and 6% for seven to ten — minimums that a cautious family often exceeds.
20. D. Shrinking reserves and negative cash flow mean the portfolio cannot absorb a bad year. A higher LTV approval (B) is an invitation to more risk, not a reason to buy.

PORTFOLIO PIECE: DEAL BINDER — BRRRR AND VALUE-ADD

Assemble this unit's section of your deal binder: the deal funnel log with two full worksheets and your parent-reviewed honest outreach letter (6.1); the line-item rehab budget with sources, contingency, RRP and permit notes and its BRRRR or Fix & flip worksheet (6.2); the contractor file — license-lookup notes, contract checklist, draw schedule and budget tracker with delay costs (6.3); the refinance stress test with base and three stress cases (6.4); and the three-property portfolio stress test with your written disciplined BRRRR rules (6.5).

Close the section with a one-page decision memo for the single best property you analyzed in this unit: the price you would pay, the rehab and schedule you would plan for, the refinance you would seek, the cash you expect to leave in the deal and the worst case you tested — or why you would walk away. Every number must trace to a worksheet in the binder.

LOOK FOR	WHAT IT MEANS
Deal funnel and outreach	At least twenty leads are logged with screening math, funnel ratios are computed, and the outreach letter passes every point of the honesty checklist with a parent's review.
Rehab budget	The scope is organized by room and system with quantities, every line is priced as labor plus materials with a source, the contingency is justified, and RRP and permit lines are identified for older homes.
Contractor file	The contract checklist is complete, the draw schedule pays only for inspected work with a final retention, the tracker handles surprises from contingency, and delay costs are carried into the worksheet.
Refinance analysis	All BRRRR worksheet lines are reproduced by hand, the full cash-out price is solved correctly, and low-appraisal, seasoning and rate stress cases are computed and interpreted.
Portfolio stress test and rules	The three properties are stressed together, equity after a value drop and reserve needs are computed, and the written rules include clear conditions for slowing down or paying down debt.

LOOK FOR	WHAT IT MEANS
Judgment and honesty	Verdicts follow from the numbers, walking away is chosen where the math requires it, every changeable figure is labeled with a source and date, and no step depends on deceiving a seller, contractor or appraiser.

UNIT 7

Flips, Short-Term and Mid-Term Rentals

A run-down house on a quiet street can be bought, fixed and sold in six months; it can be furnished and rented to vacationers by the night; it can be leased to traveling nurses by the month; or it can be held for years as an ordinary rental. In this unit you will learn to run every one of those strategies with honest numbers. You will work through the **fix-and-flip** budget line by line — **after-repair value**, rehab and **contingency**, **holding costs**, interest and **points**, selling costs — and the **70% rule** that screens offers, and you will watch a profitable flip turn into a loss when it runs three months long. You will lay out a flip's **critical path**, plan an **exit strategy** and a backup, and learn why honest disclosure is part of the job.

Then you will turn to furnished rentals. You will measure a **short-term rental** with **ADR**, **occupancy** and **RevPAR**, model it in the Rental worksheet and discover how little of its higher gross survives the extra costs — and you will learn the permits, taxes and neighborly duties that come with it. You will see how a **mid-term rental** for nurses and relocating workers sits between nightly and yearly rentals. Finally, you will analyze one real house five ways and defend one choice in a written memo — often the choice to walk away.

PREREQUISITES

- Can build NOI, cash flow, cash-on-cash and DSCR for a rental in the Rental worksheet (Unit 3)
- Can estimate an after-repair value from sold comparables and a rent from rent comparables (Unit 2)
- Can build a line-item rehab budget and explain the BRRRR refinance and cash-left-in calculation (Unit 6)
- Has a deal binder with at least ten analyzed listings and a working calculator and spreadsheet

MASTERY CHECKLIST

- ☐ I can compute a flip's total cost, profit, cash in, return on cash and annualized return in the Fix & flip worksheet and by hand.
- ☐ I can apply the 70% rule, explain why the percentage varies and solve backward for the highest sensible offer.
- ☐ I can lay out a flip's critical path, find its monthly carrying cost and compare a price cut with waiting.
- ☐ I can explain a flipper's duty to disclose known defects and test whether a flip could be rented instead.
- ☐ I can compute nights booked, revenue and RevPAR from ADR and occupancy, and model a short-term rental in the Rental worksheet.
- ☐ I can find and explain the permits, HOA rules, lodging taxes and insurance that govern short-term rentals where I live.
- ☐ I can convert stays and gaps into a vacancy rate and analyze a furnished mid-term rental, including the landlord–tenant rules that apply.
- ☐ I can analyze one property five ways, compare the strategies in a decision matrix and defend a recommendation in a written memo.

OPTIONAL BOOKS AND RESOURCES FOR THIS UNIT

- **School Launch Deal Analyzer**: Free. The Fix & flip worksheet for Lessons 7.1–7.2, the Rental worksheet for short- and mid-term rentals in Lessons 7.3–7.4, and all four worksheets for the five-strategy project in Lesson 7.5. Print each filled-in worksheet for your deal binder. Ages 14 and up.
- ***The Book on Flipping Houses* by J Scott (BiggerPockets Publishing)**: A practitioner's step-by-step guide to finding, financing, renovating and selling flips, with detailed budgets and schedules. Read alongside Lessons 7.1 and 7.2; ignore any figures that are out of date and use your own local numbers. Ages 15 and up.
- ***Short-Term Rental, Long-Term Wealth* by Avery Carl (BiggerPockets Publishing)**: A guide to analyzing, furnishing and operating vacation rentals. Use it with Lesson 7.3, and check every market example against your own city's current rules before trusting it. Ages 15 and up.
- ***30-Day Stay* by Zeona McIntyre and Sarah Karakaian (BiggerPockets Publishing)**: A guide to furnished mid-term rentals for traveling professionals and other monthly tenants. Read with Lesson 7.4, and confirm lease and deposit rules with your state's official landlord–tenant sources. Ages 15 and up.
- **IRS Publication 527, Residential Rental Property**: Free, official. The IRS guide to rental income and expenses, including the special rules for a dwelling you also use personally and for renting a home for fewer than 15 days. Skim the vacation-home section with Lesson 7.3; Unit 9 returns to it. Education only, not tax advice. Ages 15 and up.

Not required. Every project in this unit works without them. School Launch has no ties to these authors, publishers or companies.

LESSONS IN THIS UNIT

7.1	**Fix-and-Flip Math: ARV, Holding Costs and Profit**	3 sessions of 50 minutes
7.2	**Running a Flip: Timeline, Risk and Exit**	3 sessions of 50 minutes
7.3	**Short-Term Rentals: Revenue, Occupancy and Rules**	3 sessions of 50 minutes
7.4	**Mid-Term Rentals and Furnished Housing**	3 sessions of 50 minutes
7.5	**One House, Five Strategies**	3 sessions of 50 minutes

Unit 7 test

Closed notes, basic calculator only. Twenty four-choice questions, 5 points each, 100 points total. Allow about two minutes per question — set a timer for 40 minutes. Show the arithmetic for every calculation question on scratch paper, and choose the one best answer. Aim for 80% or better, and rework every miss in your notebook. Figures marked “in this example” are examples; real prices, rents, rates, fees and rules vary by place and year.

1. **5 pts**

   In this example, a house has an ARV of $260,000 and needs $45,000 of repairs. What is the 70% rule maximum offer?

   A. $137,000

   B. $182,000

   C. $140,000

   D. $92,000

2. **5 pts**

   In this example, a flipper borrows $220,000 at 12% for 6 months. Using the Deal Analyzer’s convention, how much interest is owed?

   A. $26,400

   B. $13,200

   C. $2,200

   D. $15,840

3. **5 pts**

   Which cost is NOT part of the cash a flipper must bring in before the sale?

   A. The rehab not covered by the loan

   B. Lender points

   C. Selling costs

   D. Holding costs

4. 5 pts

In this example, a flip earns a 15% return on cash in 4 months. What is the annualized return?

A. 15%

B. 60%

C. 30%

D. 45%

5. 5 pts

A person who buys houses in order to renovate and resell them is generally treated for tax purposes as holding:

A. Investment property eligible for a 1031 exchange

B. Dealer property, with profits taxed as ordinary income

C. A primary residence eligible for the Section 121 exclusion

D. Personal-use property with no tax on gains

6. 5 pts

On a flip, which task is MOST likely to sit on the critical path?

A. The rough-in inspection before drywall

B. Ordering cabinets during the permit wait

C. Painting the mailbox

D. Choosing the listing photographer

7. 5 pts

In this example, a finished flip carries a $150,000 loan at 10% and $500 a month of holding costs. What is its monthly carrying cost?

A. $1,250

B. $15,500

C. $1,750

D. $2,250

8. 5 pts

During a rehab, a flipper finds a cracked foundation footing, repairs it cosmetically and covers it with new drywall. When she sells, she should:

A. Say nothing, because the buyer can order an inspection

B. Disclose it only if the buyer asks directly

C. Lower the price but not explain why

D. Disclose the known defect as her state's disclosure law requires

9. 5 pts

In this example, a flip that will not sell could be refinanced and rented. NOI would be $13,800 and the new loan's annual debt service $16,500. What is the DSCR, and does the rental exit work?

A. 0.84; no

B. 1.20; yes

C. 1.84; yes

D. 0.16; no

10. 5 pts

In this example, a cabin's ADR is $200 and its occupancy is 55%. What is its RevPAR?

A. $90

B. $110

C. $200

D. $364

11. 5 pts

When modeling a short-term rental in the Rental worksheet, why is vacancy set near 0%?

A. Short-term rentals are never empty

B. Lenders require it

C. The revenue estimate already reflects occupancy, so vacancy would count empty nights twice

D. Vacancy is an operating expense

12. 5 pts

A short-term host collects $4,000 of lodging taxes from guests during a year. In the deal analysis, that money is:

A. Other income

B. Part of the ADR

C. A reduction of operating expenses

D. Not income; it is collected for and owed to the government

13. 5 pts

A city allows short-term rentals, but the subdivision's recorded CC&Rs forbid rentals of fewer than 30 days. An investor may:

A. Not operate a nightly rental there, because the CC&Rs still apply

B. Operate one, because the city's permit overrides the HOA

C. Operate one if guests sign a 30-day lease and leave after three nights

D. Operate one if no neighbor complains

14. 5 pts

In this example, a furnished rental's stays average 12 weeks with 3-week gaps between them. What vacancy rate should be used?

A. 3%

B. 25%

C. 20%

D. 12%

15. 5 pts

A landlord of a 1950 house signs a 90-day furnished lease that may be extended. Under the federal lead-based paint rule, she:

A. Is exempt, because the lease is under 100 days

B. Must give the EPA pamphlet and disclosure, because the lease can be extended

C. Must hire a lead inspector before the lease

D. Is exempt, because the home is furnished

16. 5 pts

A mid-term tenant on a 60-day lease refuses to leave when it ends. The landlord should:

A. Change the locks while the tenant is at work

B. Turn off the utilities until the tenant leaves

C. Report the tenant to the booking website and wait

D. Give the notice state law requires and, if needed, use the court eviction process

17. 5 pts

Which strategy commonly lets a buyer start with the least cash because it can use an owner-occupant loan?

A. House hacking

B. A cash BRRRR

C. A short-term rental bought as a second home investment

D. A hard-money flip

18. 5 pts

In highest-and-best-use analysis, which test is applied FIRST?

A. Financially feasible

B. Legally permissible

C. Maximally productive

D. Physically possible

19. 5 pts

In this example, a house would earn $21,000 a year as a long-term rental and $38,000 a year as a short-term rental. Before choosing, an investor should compare:

A. The two gross figures

B. The two cap rates on gross income

C. NOI, cash flow and cash needed after the short-term rental's extra expenses

D. Only the nightly rate against local hotels

20. 5 pts

In this example, a flip projects an $8,000 profit, and each extra month of carrying costs $2,500. If it runs 4 months long, what is the result?

A. $8,000 profit

B. $2,000 profit

C. $10,000 loss

D. $2,000 loss

ANSWER KEY

1. A. $\$260{,}000 \times 0.70 - \$45{,}000 = \$137{,}000$. B forgets to subtract the repairs; D subtracts them twice.
2. B. $\$220{,}000 \times 0.12 \div 12 \times 6 = \$13{,}200$. A is a full year's interest; C is one month's.
3. C. Selling costs are paid out of the sale proceeds at closing, so the worksheet subtracts them from total cost when computing cash in. The others are paid before the house sells.
4. D. $15\% \times 12 \div 4 = 45\%$. It assumes three such flips back to back, which is why annualized returns can flatter a single flip.
5. B. Property held primarily for sale is dealer inventory, and its profit is generally ordinary income. Dealer property cannot be exchanged under Section 1031, which is the tempting wrong answer A.
6. A. Drywall cannot start until the rough-in inspection passes, so a delay there delays everything after it. B is the classic way to keep a long-lead item off the critical path.
7. C. Interest $\$150{,}000 \times 0.10 \div 12 = \$1{,}250$ plus holding $\$500$ equals $\$1{,}750$. A forgets the holding costs.
8. D. A known material defect hidden from view is a latent defect, and sellers generally must disclose what they know. Concealing it invites lawsuits and is dishonest; A is the tempting but wrong answer.
9. A. $\$13{,}800 \div \$16{,}500 \approx 0.84$. Below 1.0 the rent does not even cover the loan, and lenders commonly want 1.2–1.25.
10. B. $\$200 \times 0.55 = \$110$. C is the ADR itself, which ignores the empty nights.
11. C. Revenue = ADR × nights booked already includes the unbooked nights. A is false — empty nights are normal.
12. D. Lodging taxes pass through the host (or the platform) to the state or city. Counting them as income would overstate revenue.
13. A. Private covenants can restrict uses the city allows. C describes evading the rule, which this course rejects and which can bring fines and lawsuits.
14. C. Occupancy $12 \div 15 = 80\%$, so vacancy is 20%. B divides 3 by 12 instead of by the full 15-week cycle.
15. B. Only leases of 100 days or less with no renewal or extension are exempt. The rule requires disclosure of known lead-based paint, not an inspection, so C is wrong.

16. D. A 30-day-plus occupant is generally a tenant under landlord–tenant law, and lockouts and utility shutoffs are illegal self-help in nearly every state.
17. A. Living in the property can qualify a buyer for owner-occupant financing with a small down payment. The others commonly require investor down payments or large cash for purchase and rehab.
18. B. A use the zoning, permits or covenants forbid is ruled out before cost or return is even considered.
19. C. Short-term rentals add utilities, furnishing, cleaning coordination, platform fees, higher insurance and more wear. In the lesson's example the gross nearly doubled while NOI rose only $18.62.
20. D. $\$8{,}000 - 4 \times \$2{,}500 = -\$2{,}000$. B subtracts only two months, and C subtracts the profit again.

PORTFOLIO PIECE: DEAL BINDER — FLIPS, SHORT-TERM AND MID-TERM RENTALS

Add this unit's analyses to your deal binder: the flip budget with its three stress tests and highest sensible offer (7.1); the critical-path chart, carrying cost and rental-exit worksheet for the same flip (7.2); the side-by-side long-term and short-term analysis with the local permit and lodging-tax findings (7.3); the furnished-rental market map, mid-term worksheets and the three state landlord–tenant rules you found (7.4); and the five worksheets, comparison table, decision matrix and one-page decision memo for a single property (7.5).

Every worksheet must be printed and dated, every verdict must state buy, negotiate to a stated price or walk away, and every legal or tax rule must cite the official source you used and the date you checked it.

LOOK FOR	WHAT IT MEANS
Flip budget and stress tests	Every cost line is present, the ARV comes from sold comparables, the three stress tests are run and the highest sensible offer is solved backward correctly.
Timeline and exit plan	The critical path is drawn with dependencies, the months entered match it, the carrying cost is computed and the rental exit is tested with a DSCR.
Short-term rental analysis	Revenue is built season by season from comparables, expenses are converted correctly, break-even occupancy is found and the permit, HOA and tax findings are cited.
Mid-term rental analysis	Vacancy is derived from stays and gaps, furnished comparables are used, furnishing is in cash invested and three state rules are cited from official sources.
Five-strategy decision memo	Property facts are identical across worksheets, illegal options are ruled out, the decision matrix is weighted to a stated buyer and the memo gives a price, risks and a backup exit.
Honesty and judgment	Verdicts follow the numbers, walking away is chosen where the numbers fail, and no plan depends on breaking a rule or hiding a defect.

7.1 Fix-and-Flip Math: ARV, Holding Costs and Profit

OBJECTIVES

- Compute a flip's total cost line by line — purchase, buyer closing costs, rehab with contingency, holding costs, interest, points and selling costs — and its profit before taxes.
- Calculate the cash a flipper must bring, the return on that cash and the annualized return, and explain why an annualized figure can flatter a single short flip.
- Apply the 70% rule to find a maximum offer and explain why investors move the percentage up or down by market and price range.
- Show with the Fix & flip worksheet how a flip that runs three months long or sells below its after-repair value can lose its whole profit.
- Explain, as education and not tax advice, why flip profits are generally taxed as ordinary income rather than as long-term capital gains.

> **Warm-up.** A house will sell for $300,000 once it is fixed up. Before you read on, list on paper every cost you think stands between buying it ugly and selling it pretty, put a dollar guess beside each, and total them. Keep the list — at the end of the lesson you will count how many lines you missed.

WATCH

How Does the 70% Rule Work When Analyzing House Flips?

InvestFourMore Real Estate · 16:29

https://www.youtube.com/watch?v=yeWbO6x-SSE

> **WHEN TO WATCH**
> Watch after the fifth core idea with your calculator. Work his whiteboard example alongside him, and note each cost he says the 70% rule hides.

BACKUP VIDEO

How to Analyze a Flip in 5 Steps | Real Estate Underwriting 101

BiggerPockets · 16:21

https://www.youtube.com/watch?v=7QYY4dZrME8

Watch after the worked examples. The house is a high-priced one, so ignore the size of the numbers and write down his five steps in order; then match each step to an input on the Fix & flip worksheet.

KEY TERMS

fix-and-flip

A strategy of buying a property below its improved value, renovating it and reselling it within months for a lump-sum profit rather than holding it for rent.

after-repair value (ARV)

The price a property is expected to sell for once the planned renovation is finished, estimated from recent sales of comparable renovated homes.

rehab budget

The line-by-line estimate of labor and materials needed to bring a property to its planned finished condition.

contingency

An extra allowance, commonly 10–20% of the rehab budget, set aside for problems discovered after work begins.

holding costs

The costs of owning a property while it is being renovated and sold, such as property taxes, insurance, utilities, lawn care and HOA dues.

hard-money loan

A short-term, higher-rate loan from a private lender secured mainly by the property itself, commonly used to buy and renovate flips.

points

An upfront lender fee stated as a percentage of the loan amount; one point equals 1% of the loan.

selling costs

The costs of selling a finished property, including agent commissions, the seller's closing costs, transfer taxes and any concessions to the buyer.

70% rule

A screening rule of thumb that a flipper should pay no more than about 70% of the after-repair value minus the repair cost.

maximum allowable offer (MAO)

The highest price an investor will pay for a property, worked backward from the after-repair value, costs and required profit.

annualized return

A return for a period shorter or longer than a year restated as if it continued for a full year (return × 12 ÷ months).

dealer property

For tax purposes, real estate held primarily for sale to customers, like a builder's or flipper's inventory, whose profit is generally taxed as ordinary income.

CORE IDEAS

The story. In 1909 a young Charleston court reporter named Susan Pringle Frost, born in 1873 into an old family whose fortunes had fallen, began working in real estate to support herself. Charleston was then a poor city full of beautiful, decaying houses, and Frost did something her neighbors thought odd: she bought run-down houses near Tradd and East Bay Streets, repaired them and resold them, often to buyers she trusted to care for them. In 1920 she opened her own real estate office and bought her first buildings in a battered row of old merchants' houses on East Bay Street — the row now called Rainbow Row. Over the 1920s she bought six of them, but she lacked the money to restore them right away, and several waited years for the work they needed. On April 21, 1920, when the Joseph Manigault House was threatened with demolition for a gas station, she gathered neighbors to found the Society for the Preservation of Old Dwellings. Frost loved houses more than profit, and she learned what every flipper learns: a house bought cheaply is not a bargain until the money and the months needed to finish it have been counted.

How they figured it out. Builders and speculators have bought, fixed and resold houses for centuries, but the arithmetic small investors use today was worked out by trial and error — and by many losses. Rehabbers noticed that the buying price was the one number they fully controlled, and a shorthand grew up among them: pay no more than about 70% of the after-repair value, minus the repairs, so that roughly 30% of the finished price is left to cover selling costs, holding costs, financing and profit. Short-term **hard-money** lenders, who lend on the property rather than the borrower's paycheck, made flips possible for people without cash and added two more lines to the budget: interest and points. Practitioners such as J Scott, who with his wife Carol flipped houses for years and wrote *The Book on Flipping Houses* and *The Book on Estimating Rehab Costs* for BiggerPockets Publishing, urged beginners to treat the 70% rule only as a screen and to build every deal line by line. Meanwhile the tax law drew its own line: a person who buys houses in order to resell them holds **dealer property**, like a store's inventory, not an investment.

The big idea. A flip has one income — the sale price — and many costs, and the profit is whatever survives them all: $\text{profit} = \text{ARV} - \text{total cost}$. The **after-repair value** (ARV) is estimated from recent sales of renovated comparable homes (Lesson 2.4), never from listing prices or the seller's hopes. The total cost has seven lines: the purchase price; the **buyer's closing costs**; the **rehab budget** plus a **contingency** for surprises behind the walls; **holding costs** for every month you own the house — taxes, insurance, utilities, lawn and snow; loan **interest** for those months; lender **points**; and **selling costs** — commissions, the seller's closing costs, transfer taxes and buyer concessions, commonly 6–10% of the sale price in total (an example range; commissions are negotiable). Time sits inside three of those lines. Every extra month adds holding costs and interest, which is why experienced flippers say the clock, not the hammer, decides most flips.

Walk through one deal the way the School Launch Fix & flip worksheet does. In this example, the ARV is $300,000 and the purchase price $180,000. Buyer closing costs at 2% are $3,600. The rehab budget is $50,000; with a 10% contingency it becomes $\$50{,}000 \times 1.10 = \$55{,}000$. A hard-money lender finances 85% of the price and all of the rehab: $0.85 \times \$180{,}000 + \$55{,}000 = \$208{,}000$. At 11% for six months, interest is $\$208{,}000 \times 0.11 \div 12 \times 6 = \$11{,}440$ (the tool assumes the whole loan is drawn on day one, a cautious convention), and 2 points cost $4,160. Holding costs of $700 a month total $4,200, and selling costs at 8% of ARV are $24,000. The total cost is $282,400, so

the profit before taxes is $\$300{,}000 - \$282{,}400 = \$17{,}600$ — only 5.9% of the sale price for half a year of risk and work.

Next ask how much of your own money the deal ties up. **Cash in** is everything you pay before the sale minus what the lender supplies; selling costs come out of the sale proceeds, so they are left out: $\$282{,}400 - \$24{,}000 - \$208{,}000 = \$50{,}400$. The return on that cash is $\$17{,}600 \div \$50{,}400 = 34.9\%$, and the **annualized return** is $34.9\% \times 12 \div 6 = 69.8\%$. That number looks thrilling and is easy to misuse: it assumes you could repeat the same flip back to back all year with no gap, no slow sale and no loss. Leverage made the return high, and leverage would make a loss just as large. Now check the **70% rule**: $\$300{,}000 \times 0.70 - \$50{,}000 = \$160{,}000$. This house was bought $20,000 above that ceiling, which is exactly why the profit is thin. Many investors use 65% in slow or low-priced markets, where fixed costs eat a larger share, and 75–80% for higher-priced homes in fast markets — always as a screen to be confirmed by the full budget.

Time is the flipper's quiet enemy. In this example, suppose the same house is bought for $190,000 instead. The loan rises to $216,500, and at six months the profit is just $6,762.50. Each extra month adds $\$216{,}500 \times 0.11 \div 12 + \$700 = \$2{,}684.58$ of interest and holding, so a three-month delay — a slow permit, a backordered window, a winter market — costs $8,053.75 and turns the profit into a loss of $1,291.25. Taxes cut further. Because a flipper holds the house for sale, its profit is generally taxed as **ordinary income**, often with self-employment tax, not as a long-term capital gain even when the house is held longer than a year, and dealer property cannot be traded in a 1031 exchange (Unit 9). That is education, not tax advice: a family planning a real flip should ask a CPA before buying.

Run the numbers. Open the Fix & flip worksheet and enter, in order: ARV, purchase price, buyer closing %, rehab budget, contingency %, months from purchase to sale, monthly holding costs, the share of price and rehab financed, the interest rate, points and selling %. Read the profit card, the return on cash, the annualized return and the 70% rule card, which tells you how far your price is above or below the ceiling. Then stress it the way the tool's note suggests: add three months, then cut the ARV by 5%, then do both at once. The classic mistakes are all on this screen: an ARV taken from the single best comparable sale or from listing prices; selling costs left out; a contingency of zero; months set to three when the city takes eight weeks to issue a permit; points and interest forgotten because the loan "is the lender's

money”; and your own labor counted as free. A flip worth doing still makes money after all three stress tests.

PICTURE STUDY



Old Tradd Street, Charleston, Published for Lanneau's Art Store, Charleston; printed by the Albertype Company, Brooklyn, c. 1920 · Photomechanical print (Albertype postcard) · Published in Charleston, South Carolina; public domain

Image: Wikimedia Commons, public domain

This postcard was printed around 1920 for a Charleston art shop, at the very moment Susan Pringle Frost was buying, repairing and reselling old houses in this part of the city. Tradd Street is one of Charleston's oldest streets, and its plain, tall houses had grown shabby in hard times. To a flipper, a street like this is a set of numbers waiting to be found: what the houses sell for once they are restored, what it costs to restore them, and how long the work will take. Frost knew the beauty of these houses; the lesson is that she also had to know their arithmetic.

Look closely

- Count the shuttered windows on the left-hand house. Every window in an old house is a line in a rehab budget — glazing, paint, hardware — and old houses have many of them.
- Notice that the houses sit right on the sidewalk with no yards. Comparable sales for an ARV must come from houses like these, not from suburban homes with lawns and garages.
- Find the cart and the automobile far down the street. In 1920 the city was changing, and a flipper's sale price depends on the market at the end of the

work, not the beginning.

- Look at the plain walls and small balconies. A careful restorer repairs what makes a house sound and saleable before spending on decoration.

Talk about it

1. If you were pricing one of these houses as a flip, which three costs would you worry about most in a house this old, and why?
2. Frost bought buildings she could not afford to finish right away. What does that teach about holding costs and about buying with a plan to finish?
3. Frost often sold to buyers she trusted to care for the houses. How might a flipper's honesty and care for the next owner be a form of loving one's neighbor?

PROJECT

The Flip Budget and the Long-Run Test

You will build a complete flip analysis for a real house that needs work, using public listings and sales data, and then try to break it. The goal is not to find a flip that works — most will not — but to learn exactly why. Everything is pretend: you contact no seller, agent or lender.

You will need

- A real public listing of a house that needs renovation (search words such as “needs work,” “handyman” or “estate sale”)
- Three recent sales of renovated comparable homes from a public listing site or the county records
- The School Launch Deal Analyzer, Fix & flip worksheet
- A spreadsheet or the blank printed worksheet, and your deal binder

Steps

1. Record the listing: price, beds, baths, square feet, year built and the condition you can see in the photos.
2. Estimate the ARV from three renovated sold comparables, adjusting for size and features as in Lesson 2.4. Write the ARV and the range of the three comps.
3. Build a rough rehab budget by room and system from the photos, using per-square-foot ranges from your notes in Lesson 6.2 as examples; add a 15% contingency because you have not walked the house.
4. Enter everything in the Fix & flip worksheet with example financing (85% of price, 100% of rehab, 11%, 2 points), $600–$900 a month of holding costs and 8% selling costs. Record profit, cash in, return on cash and the 70% rule maximum offer.
5. Run three stress tests: three months longer; ARV 5% lower; both together. Record the profit for each in a small table.
6. Solve backward: lower the purchase price until the profit in the “both together” test is at least 10% of ARV. That price is your highest sensible offer.

7. Print the worksheet and write a one-paragraph verdict — buy at the list price, negotiate to your stated price, or walk away — and file it in your deal binder.

INVESTOR'S NOTEBOOK

1. Make flashcards for every key term, plus one card with the seven cost lines of a flip in order.
2. Draw a "profit waterfall": a tall bar for the ARV, then step down by each cost — price, closing, rehab, holding, interest, points, selling — until only the profit is left. Label the lines that grow with time.
3. Write a trap list titled "Flip math," beginning with "Selling costs come out of the sale price, not out of thin air" and ending with "Annualized returns assume a perfect year."

KEY FORMULAS

$$\text{Rehab with contingency} = \text{rehab} \times (1 + \text{contingency }\%)$$
$$\text{Loan} = \text{price} \times \text{financed }\% + \text{rehab with contingency} \times \text{financed }\%$$
$$\text{Interest} = \text{loan} \times \tfrac{\text{rate}}{12} \times \text{months} \qquad \text{Points} = \text{loan} \times \text{points }\%$$
$$\text{Total cost} = \text{price} + \text{closing} + \text{rehab w/ contingency} + \text{holding} + \text{interest} + \text{points} + \text{selling}$$
$$\text{Profit} = \text{ARV} - \text{total cost} \qquad \text{Cash in} = \text{total cost} - \text{selling} - \text{loan}$$
$$\text{Return on cash} = \tfrac{\text{profit}}{\text{cash in}} \qquad \text{Annualized} = \text{return} \times \tfrac{12}{\text{months}}$$
$$70\%\text{ rule MAO} = \text{ARV} \times 0.70 - \text{rehab}$$

From history. Susan Pringle Frost's preservation society helped push Charleston to a national first. On October 13, 1931, the city adopted a zoning ordinance creating an "Old and Historic District" and a Board of Architectural Review to approve exterior changes to buildings within it — the first historic-district zoning in the United States. Today many cities have such districts, and a flipper working in one must budget for design review, approved materials and extra time.

Example 1. In this example, a flipper buys a house for $180,000 with an ARV of $300,000. Buyer closing costs are 2%, the rehab budget is $50,000 with a 10% contingency, the hold is 6 months at $700 a month, a lender finances 85% of the price and 100% of the rehab at 11% with 2 points, and selling costs are 8%. Find the profit, cash in, return on cash and annualized return. (Fix & flip worksheet.)

Show solution

1. Closing and rehab: $0.02 \times \$180{,}000 = \$3{,}600$; $\$50{,}000 \times 1.10 = \$55{,}000$.
2. Loan, interest and points: $0.85 \times \$180{,}000 + \$55{,}000 = \$208{,}000$; $\$208{,}000 \times 0.11 \div 12 \times 6 = \$11{,}440$; $0.02 \times \$208{,}000 = \$4{,}160$.
3. Holding and selling: $6 \times \$700 = \$4{,}200$; $0.08 \times \$300{,}000 = \$24{,}000$.
4. Total cost: $\$180{,}000 + \$3{,}600 + \$55{,}000 + \$4{,}200 + \$11{,}440 + \$4{,}160 + \$24{,}000 = \$282{,}400$; profit $\$300{,}000 - \$282{,}400 = \$17{,}600$.
5. Cash in: $\$282{,}400 - \$24{,}000 - \$208{,}000 = \$50{,}400$; return $\$17{,}600 \div \$50{,}400 = 34.9\%$; annualized $34.9\% \times 12 \div 6 = 69.8\%$.

Answer: Profit $17,600 (5.9% of ARV) on $50,400 of cash: 34.9% for the six months, 69.8% annualized — a thin margin for the risk.

Example 2. Using the same house (ARV \$300,000, rehab \$50,000), find the 70% rule maximum offer. Then rerun the worksheet at that price with the same financing, holding and selling assumptions and find the profit.

Show solution

1. MAO: $\$300{,}000 \times 0.70 - \$50{,}000 = \$160{,}000$.
2. New closing and loan: $0.02 \times \$160{,}000 = \$3{,}200$; loan $0.85 \times \$160{,}000 + \$55{,}000 = \$191{,}000$.
3. Interest $\$191{,}000 \times 0.11 \div 2 = \$10{,}505$; points \$3,820; holding \$4,200; selling \$24,000.
4. Total cost: $\$160{,}000 + \$3{,}200 + \$55{,}000 + \$4{,}200 + \$10{,}505 + \$3{,}820 + \$24{,}000 = \$260{,}725$.
5. Profit: $\$300{,}000 - \$260{,}725 = \$39{,}275$, or 13.1% of ARV.

Answer: At the 70% ceiling of \$160,000 the profit is \$39,275 — more than double the profit at \$180,000. The \$20,000 lower price flows almost entirely to profit.

Example 3. In this example, the same house is bought for \$190,000 with all other assumptions unchanged. Find the profit at 6 months and at 9 months.

Show solution

1. Loan: $0.85 \times \$190{,}000 + \$55{,}000 = \$216{,}500$; points \$4,330; closing \$3,800.
2. Six months: interest $\$216{,}500 \times 0.11 \div 12 \times 6 = \$11{,}907.50$; holding \$4,200; total cost \$293,237.50; profit \$6,762.50.
3. Cost of each extra month: $\$216{,}500 \times 0.11 \div 12 + \$700 = \$2{,}684.58$.
4. Nine months: $\$6{,}762.50 - 3 \times \$2{,}684.58 = -\$1{,}291.25$ (the worksheet shows total cost \$301,291.25).

Answer: A \$6,762.50 profit becomes a \$1,291.25 loss when the flip runs three months long. A deal that cannot survive a delay is not a deal.

PRACTICE

1. Easy Name the seven cost lines of a flip in the Fix & flip worksheet.

Show answer

Purchase price, buyer closing costs, rehab with contingency, holding costs, loan interest, lender points and selling costs. Profit is the ARV minus their total.

2. Easy In this example, the ARV is $250,000 and the rehab is $40,000. What is the 70% rule maximum offer?

Show answer

$\$250{,}000 \times 0.70 - \$40{,}000 = \$135{,}000$. It is a screening ceiling, not a guaranteed profit.

3. Easy Why is ARV estimated from sold comparables rather than listed homes?

Show answer

Listings show what sellers hope to get; sales show what buyers actually paid. An ARV built on listing prices usually runs high and hides losses.

4. Medium In this example, a rehab budget is $62,000 with a 15% contingency. What rehab figure goes into total cost?

Show answer

$\$62{,}000 \times 1.15 = \$71{,}300$. The contingency is a cost you plan for, not a cushion you hope to keep.

5. Medium In this example, a $230,000 hard-money loan charges 12% interest and 2 points for a 5-month flip. Find the interest and the points, using the worksheet's convention.

Show answer

Interest $\$230{,}000 \times 0.12 \div 12 \times 5 = \$11{,}500$; points $0.02 \times \$230{,}000 = \$4{,}600$. Together they cost $16,100.

6. Medium In this example, a flip's total cost is $268,000, of which $21,600 is selling costs, and the loan is $190,000. How much cash did the flipper put in?

Show answer

$\$268{,}000 - \$21{,}600 - \$190{,}000 = \$56{,}400$. Selling costs are paid from the sale proceeds, so they are not part of the cash brought in.

7. Medium In this example, a flip earns $15,000 on $50,000 of cash in 4 months. Find the return on cash and the annualized return.

Show answer

Return $\$15{,}000 \div \$50{,}000 = 30\%$; annualized $30\% \times 12 \div 4 = 90\%$. The annualized figure assumes three such flips a year with no gaps or losses.

8. Hard In this example, a flip's loan is $200,000 at 10%, and holding costs are $650 a month. How much does each extra month cost, and how many extra months would erase a $9,000 profit?

Show answer

Each month: $\$200{,}000 \times 0.10 \div 12 + \$650 = \$2{,}316.67$. $\$9{,}000 \div \$2{,}316.67 \approx 3.9$, so about four extra months erase the profit.

9. Hard In this example, a flip has an ARV of $320,000, selling costs of 8% and a projected profit of $22,000. If it actually sells for 5% less, what is the new profit?

Show answer

The new price is $304,000, so the price falls $16,000 but selling costs also fall $0.08 \times \$16{,}000 = \$1{,}280$. Profit: $\$22{,}000 - \$16{,}000 + \$1{,}280 = \$7{,}280$.

10. Hard Why might an investor use 65% instead of 70% for a $120,000-ARV house, and 75% for a $600,000-ARV house?

Show answer

Many costs — closing, permits, a minimum rehab, holding — are partly fixed, so they eat a larger share of a cheap house's ARV and a smaller share of an expensive one. The percentage changes, but the full line-by-line budget still decides.

11. Challenge In this example, the ARV is $300,000, rehab with contingency is $55,000, closing is 2% of price, holding is $4,200, selling is $24,000, and the flipper pays all cash (no interest or points). What is the highest price that leaves a $30,000 profit?

Show answer

Profit = $\$300{,}000 - (P + 0.02P + \$55{,}000 + \$4{,}200 + \$24{,}000)$. Set it to $30,000 : $1.02P = \$186{,}800$, so $P \approx \$183{,}137$. Round down to an offer of about $183,000.

12. **Challenge** A friend says, “My flip made 80% annualized, so it beats any rental.” Write three sentences explaining what the claim leaves out.

Show answer

Annualizing assumes the same flip could be repeated all year without gaps, slow sales or losses, which rarely happens. The profit is taxed as ordinary income and stops when the work stops, while a rental keeps paying and builds equity. A fair comparison uses after-tax dollars per year, the time and risk involved and the chance of a loss.

COMMON MISTAKES

- Taking the ARV from listing prices or from the single best sale. Use several recent sold comparables in the same renovated condition.
- Leaving out selling costs. Commissions, seller closing costs, transfer taxes and concessions commonly take 6–10% of the sale price (an example range).
- Budgeting the rehab with no contingency. Plan 10–20% for what you cannot see until the walls are open.
- Setting the hold too short. Count permits, contractor schedules, inspections, listing time and the 30–45 days a sale commonly takes to close.
- Treating the annualized return as a promise. It assumes a perfect year of back-to-back flips; judge a flip by its dollar profit after stress tests.
- Assuming flip profits are taxed like long-term investments. A flipper generally holds dealer property, taxed as ordinary income; ask a CPA before buying.

> **Make it a game · The Long-Haul Flip.** Each player starts with the lesson’s $190,000 flip: a $6,762.50 profit at six months, with every extra month costing $2,685 (rounded). In turn, each player rolls one die for “surprises”: 1–2 means the permit came on time (no delay), 3–4 adds one month, 5 adds two months and 6 adds two months and a $3,000 repair. Players subtract the costs on scratch paper and announce their final profit or loss. Then play again at the 70% rule price of $160,000, where profit starts at $39,275 and each extra month costs $2,451 (rounded). Talk about which deal let you sleep at night.

> **Scripture.** “Through wisdom is an house builded; and by understanding it is established: And by knowledge shall the chambers be filled with all precious and pleasant riches.” (Proverbs 24:3–4, KJV)
>
> The proverb names three things a house needs: wisdom to plan it, understanding to make it stand and knowledge to fill it well. A flip needs all three — wisdom about price and risk, understanding of the work and its order, and knowledge of every cost — before a single wall comes down. Without them, a renovation empties the purse instead of filling the chambers.

7.2 Running a Flip: Timeline, Risk and Exit

OBJECTIVES

- Lay out a flip's critical path from purchase to closing — permits, trades in order, inspections, listing and sale — and estimate its length in days.
- Calculate a flip's monthly carrying cost and use it to compare cutting the price with waiting for a buyer.
- Evaluate the "rent it instead" exit by refinancing a finished flip and running the Rental worksheet.
- Explain a seller's duty to disclose known defects and why honest disclosure and quality work protect a flipper's reputation.
- Identify the market, contractor and permit risks of a flip and name one way to reduce each.

> **Warm-up.** Write down, in order, everything that must happen to repaint a bedroom: buy paint, move furniture, patch holes, prime, paint, let it dry, put furniture back. Circle any step that cannot start until another one finishes. You have just drawn a critical path — now imagine one for a whole house.

WATCH

When House Flipping Goes WAY Over Budget (Before & After)

BiggerPockets · 22:42

https://www.youtube.com/watch?v=2DCh2-dN1Nw

> **WHEN TO WATCH**
> Watch after the third core idea. As he walks the finished house, list every cause of the overrun he names, and sort each into contractor, permit or market risk.

BACKUP VIDEO

Advice For Flipping Houses In a Changing Real Estate Market w/ J. Scott & Tarl Yarber

BiggerPockets · 8:38

https://www.youtube.com/watch?v=ygDDX_r6y4k

Watch with the fifth core idea and write down each piece of advice for a changing market; next to each, name the risk from this lesson that it defends against.

KEY TERMS

critical path

The longest chain of tasks that must happen one after another; any delay on it delays the whole project.

building permit

Written permission from the local government to do regulated construction work, followed by inspections to confirm the work meets code.

carrying cost

The total cost of owning a property for one more month, chiefly loan interest plus holding costs.

exit strategy

The planned way an investor gets out of a deal, such as selling, renting or refinancing, including a backup plan if the first one fails.

seller's disclosure

A written statement, often on a state-required form, in which a seller reports known conditions and defects of the property.

punch list

The final list of small unfinished or faulty items that a contractor must complete before a job is accepted.

scope of work

A written list of exactly what work will be done, room by room and system by system, with materials and finish levels.

rough-in inspection

An inspection of plumbing, electrical or mechanical work before walls are closed, required before drywall can go up.

days on market (DOM)

The number of days a property is listed for sale before it goes under contract.

latent defect

A hidden defect that a reasonable inspection would not reveal, which a seller who knows of it generally must disclose.

staging

Furnishing and arranging a finished house so buyers can picture living in it, to shorten days on market.

CORE IDEAS

The story. In the mid-1920s the Reverend W. A. R. Goodwin, rector of Bruton Parish Church in Williamsburg, Virginia, interested John D. Rockefeller Jr. in restoring the faded colonial capital, and on November 22, 1927, Rockefeller committed to restoring the town on a grand scale. The planners faced a problem every renovator faces in miniature: they did not know exactly what they were rebuilding. Several key buildings, including the colonial Capitol and the Governor's Palace, had vanished, and the main college building had been altered by fires and rebuildings. Then, in December 1929, the researcher Mary F. Goodwin found an eighteenth-century copperplate engraving in the Bodleian Library at Oxford showing the Capitol, the Palace and the college buildings as they had once stood. The "Bodleian Plate" changed the plans. Work that had been guessed at could now be done right, and on February 24, 1934, the reconstructed Capitol was dedicated with a meeting of the Virginia General Assembly. Williamsburg teaches a renovator's first rule: find out what you are dealing with before you build.

How they figured it out. The Williamsburg planners did their research first — old maps such as the "Frenchman's Map" of 1782, insurance records, written descriptions, early photographs and digging in the ground — and only then let the builders in. Construction managers in the twentieth century turned this habit into a method. They listed every task, noted which tasks depended on which, and found the **critical path**: the longest chain of dependent steps, where any delay delays everything. A flipper's critical path runs through the city: a **building permit** must be issued before regulated work begins, and a **rough-in inspection** must pass before walls are closed. Experienced flippers learned to order long-lead items such as cabinets and windows during the permit wait, to write a detailed **scope of work** before hiring anyone (Lesson 6.3), and to plan the **exit** — and a second exit — before buying.

The big idea. A flip is a race against its own carrying cost, run through a sequence that cannot be rushed. The **carrying cost** is what one more month of ownership costs: loan interest plus holding costs. In this example, using the Lesson 7.1 flip, it is $\$208{,}000 \times 0.11 \div 12 + \$700 = \$2{,}606.67$ a month. Every decision about time is a decision about that number. Three kinds of risk can stretch the clock. **Contractor and scope risk**: hidden rot, a sub who disappears, change orders. **Permit risk**: a slow building department or a failed inspection. **Market risk**: rising interest rates or a

softening market that lowers buyers' budgets while you own the house. A careful flipper reduces each — a thorough inspection and contingency for the first, an early permit application and licensed trades for the second, and a purchase price low enough to survive a lower ARV for the third — and plans an exit for the day the house does not sell.

Build the timeline before you buy. In this example the rehab path runs: permit 15 days, demolition 5, rough plumbing and electrical 10, rough-in inspection 3, drywall 8, paint 5, flooring 5, kitchen install 7, final inspection 3 and punch list 4 — 65 days. The sale path adds 30 days on market and 35 days from contract to closing, another 65, so the flip takes about 130 days, a little over four months. Some steps overlap: cabinets can be ordered during the permit wait, and exterior work can run beside interior work. Others cannot: drywall waits on the inspection, and flooring waits on drywall dust. If the permit takes 45 days instead of 15, the whole flip slips a month, costing about $2,607 in this example. Write the timeline in your scope of work and agree on it with your contractor in writing, with a draw schedule tied to finished stages, not dates.

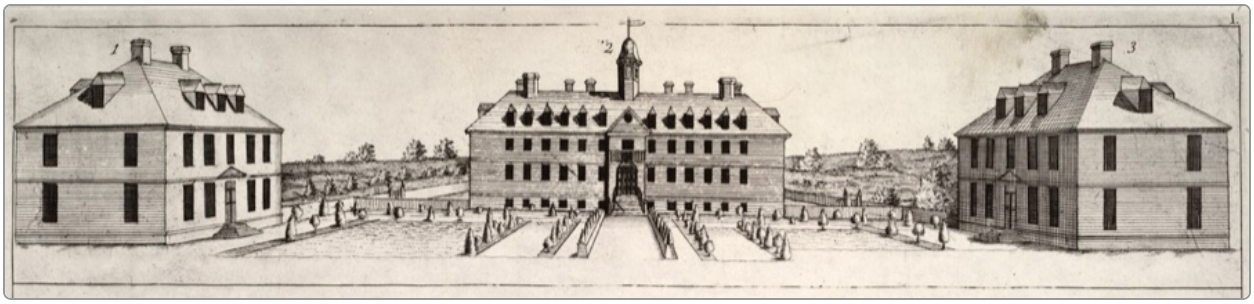
When the house is done, the sale begins. Price it from the same sold comparables that set the ARV; a flip priced above them sits, and every month on the market costs carrying cost. **Staging** and good photographs shorten **days on market**. If it does not sell, compare choices with arithmetic. In this example, a $10,000 price cut equals $\$10{,}000 \div \$2{,}606.67 \approx 3.8$ months of carrying cost, so cutting the price now is often cheaper than waiting four months and cutting it anyway. The other exit is to keep the house as a rental: refinance the short-term loan into a long-term mortgage and rent it out. That only works if the rent covers the new loan — run the Rental worksheet before you count on it. A flipper with no second exit is gambling on one buyer.

Honesty is part of running a flip. In most states a seller must disclose known material defects, often on a state seller's disclosure form, and a **latent defect** — one an inspection would not reveal, like a foundation crack hidden behind new drywall — must not be concealed. For homes built before 1978, federal law requires sellers to disclose known lead-based paint and give buyers the EPA pamphlet; renovation work that disturbs paint in such homes must be done by EPA-certified renovators (Lesson 6.2). Covering problems with fresh paint is not only wrong; it invites lawsuits and destroys the reputation a flipper needs to find buyers, agents and contractors for the next deal. The flippers who last are known for quality: permits

pulled, work done to code, inspection reports shared, and houses they would let their own families live in.

Run the numbers. In the Fix & flip worksheet, the months field is your timeline, so set it from a written critical path, not a hope, and test it at plus three months. Divide (interest + holding) by months to find your monthly carrying cost and write it on the worksheet. For the rent-it exit, open the Rental worksheet. In this example, refinancing the finished $300,000 house at 75% gives a $225,000 loan at 7.25% for 30 years, $1,534.90 a month of principal and interest. At $2,100 rent with 6% vacancy, $3,000 of taxes, $1,400 of insurance and 6%/7%/9% for repairs, CapEx and management, NOI is $13,880.08 against debt service of $18,418.76 — a DSCR of 0.75 and a loss of about $378 a month. Here the rental exit fails, so the honest plan is to price the house to sell. The classic mistakes: assuming a flip that will not sell "can always be rented," leaving the months field at its default, and forgetting that a refinance needs an appraisal and a lender who will accept it.

PICTURE STUDY



The College Yard at Williamsburg, from the Bodleian Plate, Unknown engraver (the "Bodleian Plate"); photographic print from the copperplate, Plate engraved c. 1740; print made in the twentieth century · Engraving (detail: top row of the copperplate) · Copperplate found in the Bodleian Library, Oxford, in 1929; print in the A. D. White Architectural Photographs collection, Cornell University; public domain

Image: Wikimedia Commons, public domain

This is the top row of the Bodleian Plate, the eighteenth-century copperplate that Mary F. Goodwin found at Oxford in December 1929. It shows the College of William & Mary's main building flanked by two smaller buildings, with numbers keyed to a list. For the restorers of Williamsburg it was gold: until it was found, they had no complete colonial picture of the main building's west side. The plate opens this lesson because every good renovation begins the same way — with research that tells you what you are really working on, before a single wall comes down.

Look closely

- Find the numbers 1, 2 and 3 above the buildings. The engraver keyed each building to a list, just as a good scope of work numbers every room and task.
- Look at the dormer windows and chimneys of the center building. Details like these were exactly what the restorers could not guess and needed the plate to see.
- Study the formal garden of paths and shrubs in front. Restorers rebuilt grounds as well as buildings; a flipper's budget must include the yard buyers see first.
- Notice the symmetry: the two side buildings mirror each other. Planning the whole composition first kept the parts in harmony — a lesson for choosing finishes.

Talk about it

1. How did one engraving change the restorers' plans, and what is the flipper's equivalent of finding the Bodleian Plate before buying?
2. Which steps of the Williamsburg work could happen at the same time, and which had to wait — just as drywall waits on an inspection?
3. Proverbs 22:3 says the prudent man "foreseeth the evil." What troubles could a renovator foresee by doing research before building, and how is that a matter of character as well as skill?

PROJECT

The Critical Path and the Second Exit

You will take the flip you analyzed in Lesson 7.1 and turn its single "months" number into a real schedule, then test whether the house could be rented if it does not sell. You will finish with a printed Fix & flip worksheet, a printed Rental worksheet for the backup exit and a verdict.

You will need

- Your Lesson 7.1 flip analysis and rehab budget
- Your county or city building department website (permit types and typical review times, if posted)
- Three rent comparables for the finished house from a public rental-listing site
- The Deal Analyzer's Fix & flip and Rental worksheets, and a spreadsheet or graph paper

Steps

1. From your rehab budget, list every task and estimate its days. Mark which tasks need a permit or inspection, using your building department's website to see which work is regulated.
2. Draw the tasks as a chain of boxes and arrows, putting tasks that can overlap side by side. Total the longest chain: that is your critical path. Add days on market (from recent sales near you) and 35 days to close.
3. Convert the total to months, round up and enter it in the Fix & flip worksheet. Record the new profit and your monthly carrying cost.
4. Write a one-line plan to reduce each risk: contractor and scope, permit and inspection, and market.
5. For the backup exit, estimate the finished house's rent from three comparables. In the Rental worksheet, enter a refinance at 75% of your ARV with an example rate, the rent and full expenses. Record the cash flow and DSCR.

6. Print both worksheets and write your verdict: buy and flip, buy only at a lower stated price, or walk away. Say whether the rental exit works, and file everything in your deal binder.

INVESTOR'S NOTEBOOK

1. Make flashcards for the key terms, plus a card titled "Three risks, three defenses."
2. Draw the lesson's 130-day timeline as a bar chart (a Gantt chart): one bar per task, laid along a calendar, with overlapping tasks side by side and the critical path colored.
3. Write a trap list titled "Running a flip," including "A flip that won't sell can't always be rented" and "Paint over a problem and you still own the problem."

KEY FORMULAS

$$\text{Monthly carrying cost} = \text{loan} \times \frac{\text{rate}}{12} + \text{monthly holding costs}$$

$$\text{Months of carrying cost a price cut equals} = \frac{\text{price cut}}{\text{monthly carrying cost}}$$

$$\text{Timeline} = \sum(\text{days of each task on the critical path})$$

$$\text{DSCR (rental exit)} = \frac{\text{NOI}}{\text{annual debt service on the new loan}}$$

From history. Besides the Bodleian Plate, the Williamsburg restorers leaned on the "Frenchman's Map," a plan of the town drawn in 1782, the year after the Yorktown campaign, that shows the outline of building after building along the streets. Combined with insurance records, deeds and excavations of old foundations, it let researchers place reconstructed buildings on their original sites. The lesson for any renovator is the same: old records — permits, plans, inspection reports — are cheaper than surprises.

WORKED EXAMPLES

Example 1. In this example, a flip's tasks on the critical path are: permit 15 days, demolition 5, rough-in work 10, rough-in inspection 3, drywall 8, paint 5, flooring 5, kitchen 7, final inspection 3, punch list 4; then 30 days on market and 35 days to close. How long is the flip, and what happens if the permit takes 45 days?

Show solution

1. Rehab path: $15 + 5 + 10 + 3 + 8 + 5 + 5 + 7 + 3 + 4 = 65$ days.
2. Sale path: $30 + 35 = 65$ days; total $65 + 65 = 130$ days, about 4.3 months.
3. A 45-day permit adds $45 - 15 = 30$ days: 160 days, about 5.3 months.
4. Enter 5 months, not 4, in the Fix & flip worksheet, and test 8.

Answer: About 130 days (4.3 months); a slow permit pushes it to about 160 days (5.3 months). Budget for the longer one.

Example 2. In this example, a finished flip carries a $208,000 loan at 11% and $700 a month of holding costs. It has sat on the market for 60 days. The agent suggests a $10,000 price cut. How many months of carrying cost does the cut equal?

Show solution

1. Monthly interest: $\$208{,}000 \times 0.11 \div 12 = \$1{,}906.67$.
2. Monthly carrying cost: $\$1{,}906.67 + \$700 = \$2{,}606.67$.
3. Months equal to the cut: $\$10{,}000 \div \$2{,}606.67 \approx 3.8$.
4. If the cut sells the house within the next four months that it would otherwise sit, it costs no more than waiting — and removes the risk of a falling market.

Answer: The cut equals about 3.8 months of carrying cost. If the comparables say the price is high, cutting now usually beats waiting.

Example 3. In this example, the flip will not sell, and the owner considers renting it. A lender will refinance at 75% of a $300,000 appraisal, 7.25%, 30 years. Rent is $2,100 a month with 6% vacancy; taxes $3,000; insurance $1,400; repairs 6%, CapEx 7%, management 9%. Does the rental exit work? (Rental worksheet.)

Show solution

1. Loan $0.75 \times \$300{,}000 = \$225{,}000$; P&I $\$1{,}534.90$ a month; debt service $\$18{,}418.76$ a year.
2. GSI $\$2{,}100 \times 12 = \$25{,}200$; vacancy $\$1{,}512$; EGI $\$23{,}688$.
3. Operating expenses: $\$3{,}000 + \$1{,}400 + \$1{,}512 + \$1{,}764 + \$2{,}131.92 = \$9{,}807.92$ (repairs and CapEx on GSI, management on EGI).
4. NOI $\$23{,}688 - \$9{,}807.92 = \$13{,}880.08$; cash flow $\$13{,}880.08 - \$18{,}418.76 = -\$4{,}538.68$ a year; DSCR 0.75.

Answer: No. The rental would lose about $378 a month, and a DSCR of 0.75 is below what lenders commonly require. The better exit is to price the house to sell.

PRACTICE

1. Easy What is a critical path?

   Show answer

   The longest chain of tasks that must be done one after another. Any delay on it delays the whole project, so it sets the flip's length.

2. Easy Name the three kinds of risk that can stretch a flip's timeline.

   Show answer

   Contractor and scope risk, permit and inspection risk, and market risk. Each adds months of carrying cost.

3. Easy What is a latent defect, and what should a seller who knows of one do?

   Show answer

   A hidden defect a reasonable inspection would not reveal. A seller who knows of it should disclose it; in most states the law requires disclosure of known material defects.

4. Medium In this example, a flip carries a $180,000 loan at 12% and $650 a month of holding costs. What is the monthly carrying cost?

Show answer

$\$180{,}000 \times 0.12 \div 12 + \$650 = \$1{,}800 + \$650 = \$2{,}450$ a month.

5. Medium In this example, the rehab path is 72 days, the house sits on the market 40 days and closing takes 35 days. How many months should you enter in the Fix & flip worksheet?

Show answer

$72 + 40 + 35 = 147$ days, about 4.9 months; enter 5 and test 8.

6. Medium In this example, the monthly carrying cost is $2,450 and the agent suggests a $7,500 price cut. How many months of carrying cost does that equal?

Show answer

$\$7{,}500 \div \$2{,}450 \approx 3.1$ months. If the cut sells the house more than about three months sooner, it saves money.

7. Medium Why should cabinets and windows be ordered during the permit wait?

Show answer

They often take weeks to arrive. Ordering them while the permit is processed takes them off the critical path, so they do not delay the job later.

8. Hard In this example, a finished flip would rent for $1,900. A refinance gives NOI of $13,200 and annual debt service of $15,400. Find the DSCR and say whether the rental exit works.

Show answer

DSCR $\$13{,}200 \div \$15{,}400 \approx 0.86$. Below 1.0 the rent does not cover the loan, and lenders commonly want 1.2–1.25, so the rental exit fails.

9. Hard A contractor offers to skip the permit for a bathroom remodel to save three weeks. Give two reasons to refuse.

Show answer

Unpermitted work may be unsafe, may have to be opened up and redone, and must often be disclosed to buyers, who may walk away or demand a lower price. It also exposes the owner to fines and destroys the trust a flipper's reputation depends on.

10. Hard Explain how rising interest rates during a six-month flip can hurt the flipper even if the flipper's own loan is fixed.

Show answer

Buyers borrow at the new, higher rates, so the same monthly payment buys a smaller loan and their budgets fall. Sale prices can soften and days on market stretch, adding carrying cost.

11. Challenge In this example, a flip projects a $24,000 profit at 5 months with a carrying cost of $2,600 a month. If the permit adds 1 month and the market adds 2 months on the market, and the house sells 3% below its $310,000 ARV with 8% selling costs, what is the profit?

Show answer

Delay cost $3 \times \$2{,}600 = \$7{,}800$. Price drop $0.03 \times \$310{,}000 = \$9{,}300$, less the selling-cost saving $0.08 \times \$9{,}300 = \$744$. Profit $\$24{,}000 - \$7{,}800 - \$9{,}300 + \$744 = \$7{,}644$.

12. Challenge Write a three-sentence exit plan for a flip: the first exit, the trigger for changing course, and the second exit.

Show answer

A good answer names the planned sale price from sold comparables and a target days on market; a clear trigger such as "no offer after 45 days at the comparable price"; and a second exit already tested with numbers, such as a stated price cut or a refinance and rental that the Rental worksheet shows can cover its debt.

COMMON MISTAKES

- Setting the months field from hope instead of a written critical path. Count permits, inspections, days on market and closing.
- Ordering long-lead materials after demolition. Order cabinets, windows and special items during the permit wait.
- Refusing to cut the price of a stale listing. Compare the cut with months of carrying cost; waiting is rarely free.
- Assuming a flip that will not sell can always be rented. Run the Rental worksheet with a refinance; many flips bought for resale prices cannot cover a rental loan.

- Skipping permits to save time. Unpermitted work can be unsafe, must often be disclosed and can cost far more later.
- Hiding defects behind new finishes. Known material defects must generally be disclosed, and concealment invites lawsuits and ruins a reputation.

Make it a game · Critical Path Relay. Write twelve flip tasks on index cards — permit, demolition, rough plumbing, rough electrical, rough-in inspection, drywall, paint, flooring, cabinets ordered, kitchen install, final inspection, listing — with a day count on each. Shuffle and deal them. Working together against a five-minute timer, the family lays the cards in a line or side by side to show which tasks can overlap, then totals the longest chain. A referee checks with the lesson's rules (drywall after inspection, flooring after paint). Then draw a "trouble card" — failed inspection, plus 7 days — and recompute the carrying cost at $2,607 a month.

Scripture. "A prudent man foreseeth the evil, and hideth himself: but the simple pass on, and are punished." (Proverbs 22:3, KJV)

The prudent person sees trouble coming and prepares; the simple walk straight into it. A flipper who writes the critical path, tests the extra months, prices the house to sell and plans a second exit is foreseeing the evil. The one who hopes the permit, the contractor and the market will all cooperate is passing on to be punished.

7.3 Short-Term Rentals: Revenue, Occupancy and Rules

OBJECTIVES

- Compute nights booked, annual revenue and RevPAR from an average daily rate and an occupancy rate.
- Model a short-term rental in the Rental worksheet by converting expected revenue to a monthly figure and raising utilities, repairs, CapEx, management and other expenses to match.
- Compare a short-term rental with a long-term rental of the same house on gross income, NOI, cash needed and risk, and find the occupancy at which the short-term rental breaks even.
- Describe the local rules that govern short-term rentals — permits and licenses, zoning, HOA covenants, lodging taxes, insurance and safety — and where to find them.
- Explain a short-term host's duties to neighbors and guests and why following the rules is part of honest business.

> **Warm-up.** A cabin rents for $170 a night. Guess how many nights a year it will be booked, then multiply to get a year's revenue. Now list five costs a nightly rental has that a house rented to one family for a year does not. Keep your guesses; the lesson will test them.

WATCH

I Own 5 Short-Term Rentals — Here's What Most People Get Wrong

Mark J Kohler · 21:32

https://www.youtube.com/watch?v=AJHRTw3KDqQ

> **WHEN TO WATCH**
> Watch 0:00–2:46 and 10:36–21:19 after the core ideas; the middle section on tax rules belongs with Unit 9. Note what he says about local regulations and why a short-term rental is not passive.

BACKUP VIDEO

How to Apply for a Short-Term Rental Permit

CityofPhoenixAZ · 4:52

https://www.youtube.com/watch?v=MJMEEP0fiAg

Watch after the fifth core idea. It shows one city's permit portal; list each piece of information the city asks for, then check whether your own city requires something similar.

KEY TERMS

short-term rental (STR)

A furnished dwelling rented to guests for short stays, commonly fewer than 30 consecutive nights, often called a vacation rental.

average daily rate (ADR)

Total room or rental revenue divided by the number of nights actually booked.

occupancy rate

Nights booked divided by nights available, expressed as a percentage.

RevPAR

Revenue per available night (or room), equal to total revenue divided by nights available, or ADR × occupancy.

seasonality

The regular rise and fall of demand and prices through the year, such as summer peaks and winter lulls in a beach town.

lodging tax

A state or local tax, also called a transient occupancy or hotel tax, charged on short stays and collected from guests for the government.

STR permit (license)

Local government permission, where required, to operate a short-term rental, often with safety, parking, occupancy and tax-registration conditions.

covenants, conditions and restrictions (CC&Rs)

Recorded rules of a homeowners association or subdivision that may limit or forbid rentals shorter than a set number of days.

platform fee

The fee a booking website charges the host, the guest or both for each reservation.

cleaning fee

A per-stay charge to guests that pays for cleaning and resetting the property between stays.

break-even occupancy

The occupancy rate at which revenue exactly covers operating expenses and debt service.

CORE IDEAS

The story. For years before the Civil War, Methodist families gathered each summer for camp meetings in an oak grove on Martha's Vineyard called Wesleyan Grove. They came first with tents, then built wooden platforms, and then small wooden cottages with steep roofs and carved trim, crowded together around the preaching ground. Visitors began arriving by steamer to see them. In 1866 developers hired the landscape designer Robert Morris Copeland to lay out a planned summer resort beside the grove, and between 1868 and 1871 the Oak Bluffs Land and Wharf Company sold five hundred lots. On February 17, 1880, the busy summer community was incorporated as its own town, named Cottage City; in 1907 it took the name Oak Bluffs. Summer visitors filled its cottages and hotels, and the town has had to balance the guests who crowd its streets each summer with the neighbors who live there all year — the same balance every short-term rental must strike today.

How they figured it out. Hotel keepers worked out how to measure a nightly business long before the internet. They tracked **occupancy** — the share of available rooms rented each night — and the **average daily rate** (ADR) actually paid, and they multiplied the two to get **RevPAR**, revenue per available room, the single number that shows whether higher prices or fuller rooms earn more. In October 2007 two

roommates in San Francisco rented air mattresses on their living-room floor to visitors who could not find hotel rooms during a design conference; their idea grew into the large online booking platforms that let ordinary owners rent houses by the night. As short-term rentals spread through residential neighborhoods, cities responded during the 2010s with permits, licenses, registration numbers, caps, safety inspections and lodging-tax collection. Today a host must answer to the market, the platform, the tax collector, the city and the neighbors.

The big idea. A short-term rental trades one tenant's steady rent for many guests' nightly rates, and the trade raises both revenue and expenses. Revenue is $\text{ADR} \times$ nights booked, where nights booked equal 365 × occupancy, and $\text{RevPAR} = \text{ADR} \times$ occupancy. In this example, a house books 62% of the year at an ADR of $170: $365 \times 0.62 = 226.3$ nights, revenue $226.3 \times \$170 = \$38{,}471$ and RevPAR $105.40. Rented to one family for a year, the same house would bring $1,750 a month, $21,000 a year. But the nightly host pays all the utilities, internet and supplies; buys and replaces furniture, linens and dishes; pays cleaners or a co-host (often 15–25% of revenue in this example range); pays **platform fees**; carries more expensive insurance; and wears out the house faster. Guests' **cleaning fees** usually pass through to the cleaners, and **lodging taxes** collected from guests belong to the government — neither is the host's income.

Model it in the Rental worksheet. In this example the house costs $200,000 with 25% down at 7%, so debt service is $11,975.44 a year either way. As a long-term rental — rent $1,750, 6% vacancy, taxes $2,400, insurance $1,200, repairs 6%, CapEx 7%, management 9% — NOI is $11,633.40 and cash flow about −$28 a month on $55,000 invested. As a short-term rental, enter $\$38{,}471 \div 12 = \$3{,}205.92$ as the monthly "rent," vacancy 0% (occupancy already counts the empty nights), insurance $2,000, utilities $400 a month, other expenses $250 a month for supplies, platform fees and the license, repairs 8%, CapEx 10% for furnishings and management 20%; put $20,000 of furnishing in upfront repairs. NOI is $11,652.02 and cash flow about −$27 a month on $75,000 invested. The short-term rental nearly doubled the gross and changed the NOI by $18.62. That is the most important lesson about nightly rentals: gross revenue is not profit.

Short-term rentals are governed by local rules, and they change often. Many cities require a permit or business license, a registration number in every listing, safety items such as smoke and carbon-monoxide alarms and fire extinguishers, posted

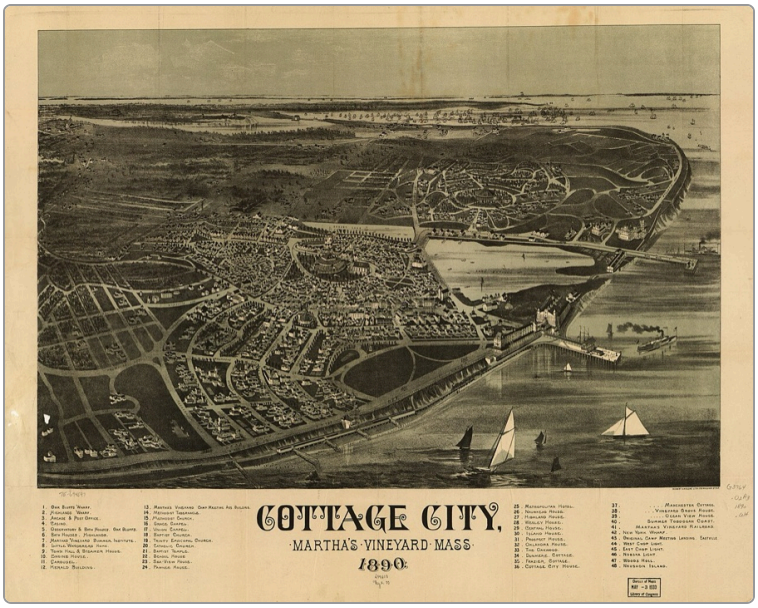
occupancy and parking limits and a local contact who answers complaints. Some allow nightly rentals only in the owner's primary residence, cap the number of permits or forbid them in certain zones. A homeowners association's **CC&Rs** may forbid rentals shorter than 30 days no matter what the city allows. Most states and many cities charge **lodging taxes**; in some places the platform collects them, and in others the host must register and remit. A standard homeowner's policy commonly excludes business use, so a host needs coverage written for short-term rental. Find the rules on your city or county code website, the state revenue department's lodging-tax page and the HOA documents before analyzing a deal. Never plan to operate without a required permit or to evade a rule: an illegal rental can be fined or shut down, and the whole investment depends on permission you do not control.

Short-term revenue is also less certain. Demand swings with **seasonality** — a beach house may earn most of its year in ten summer weeks — and with new competition, travel trends and reviews. Turnover is constant: every stay means cleaning, restocking and the chance of damage. Good hosts are good neighbors, setting quiet hours, limiting guests and cars to what the house and street can handle, managing trash and answering complaints quickly; the guests are the host's responsibility. Taxes differ too: IRS Publication 527 has special rules when you also use the home personally, and short average stays can change how rental income and losses are treated (Unit 9) — questions for a CPA. Finally, test the occupancy. In this example, fixed costs (taxes, insurance, utilities, other and debt service) total $24,175.44 and variable costs take 38% of revenue, so the house breaks even at revenue of $\$24{,}175.44 \div 0.62 \approx \$38{,}993$ — about 63% occupancy. At 45% occupancy it loses about $572 a month.

Run the numbers. The Deal Analyzer has no short-term worksheet, so use the Rental worksheet with these changes: monthly rent = expected annual revenue ÷ 12 (net of cleaning fees and taxes that pass through); vacancy near 0% because occupancy is already in the revenue; owner-paid utilities for everything the guest uses; other expenses for supplies, platform fees, permits and software; repairs and CapEx several points higher than for a long-term rental; management at the co-host or cleaning-coordination rate even if you plan to do it yourself; and the furnishing budget in upfront repairs so cash-on-cash is honest. Build the revenue from comparable listings' calendars and nightly rates across a whole year, not from the best summer week. Then run occupancy 15 points lower and ADR 10% lower. The

classic mistakes: comparing short-term gross with long-term rent and calling the difference profit; leaving utilities and furnishing at zero; skipping the permit and HOA check; and counting lodging taxes or cleaning fees as income.

PICTURE STUDY



Cottage City, Martha's Vineyard, Mass., 1890, Robert A. Welcke, 1890 · Lithograph (bird's-eye-view map) · Library of Congress, Geography and Map Division; public domain

Image: Wikimedia Commons, public domain

Bird's-eye views like this one were popular in the late 1800s: artists walked a town, sketched every building and drew it as if from a balloon, and towns sold the prints to proud residents and promoters. Robert A. Welcke's 1890 view shows Cottage City ten years after it became a town — the old camp-meeting grounds with their packed cottages, the new resort streets, the hotels and the steamer wharf that brought summer visitors. It opens this lesson because it is a picture of a whole town built around short stays, and of the steamers, hotels and cottages that had to share the same streets.

Look closely

- Find the round, crowded clusters of tiny cottages near the center. These grew from the camp meeting's tents and were rented and used by the week each summer.
- Find the steamboat at the wharf. Visitor access — then steamers, now airports and highways — drives a short-term rental market.
- Read the key at the bottom: hotels, chapels, a casino building, a bath house. A host's competition includes hotels, and so does the price a guest will pay.
- Look at how close together the cottages stand. Short stays in tight neighborhoods are exactly why towns write rules about noise, parking and

occupancy.

Talk about it

1. How would the summer season in this town show up in a short-term rental's occupancy and revenue across the year?
2. Which neighbors on this map would be most affected by a cottage rented to a new group of guests every few days, and what rules might protect them?
3. Romans 13:7 tells believers to render tribute and custom to whom they are due. How do lodging taxes and permits fit that teaching for a short-term host?

PROJECT

Nightly or Yearly? A Side-by-Side Analysis

You will analyze one real house both ways — as a long-term rental and as a short-term rental — using public data, and check the local rules before trusting either number. Use a town near you or a vacation area your family knows. All research is online and pretend.

You will need

- One real listing for sale in a town where visitors stay
- Three long-term rent comparables, and five comparable short-term listings with their nightly rates and visible calendars
- Your city or county code website, the state revenue department's lodging-tax page and (if any) the HOA's published rules
- The Deal Analyzer's Rental worksheet and a spreadsheet

Steps

1. Look up the local short-term rental rules: is a permit or license required, is it allowed in this zone, is there an owner-occupancy requirement or cap, and what lodging taxes apply? Write the source and date of each answer.
2. From the short-term comparables, estimate an ADR and occupancy for each season (for example, summer, fall, winter, spring) and combine them into a year's revenue. Compute RevPAR.
3. Run the Rental worksheet as a long-term rental with full expenses. Print it.
4. Run it again as a short-term rental using the lesson's conversions: revenue ÷ 12 as rent, vacancy near 0%, owner-paid utilities, other expenses, higher repairs and CapEx, management at a co-host rate and the furnishing budget in upfront repairs. Print it.
5. Find the short-term break-even occupancy with the lesson's formula, and run the worksheet at an occupancy 15 points lower.
6. Write a one-paragraph verdict: long-term, short-term (only if legal and permitted) or walk away, with the numbers and the rules that decided it. File both worksheets in your deal binder.

INVESTOR'S NOTEBOOK

1. Make flashcards for the key terms, plus a card with the three linked formulas: nights = 365 × occupancy, revenue = ADR × nights, RevPAR = ADR × occupancy.
2. Draw a two-column table, "Long-term" and "Short-term," with rows for revenue, vacancy, utilities, furnishing, repairs and CapEx, management, insurance, taxes and rules. Fill it with the lesson's numbers.
3. Write a trap list titled "Nightly rentals," including "Gross is not profit," "Cleaning fees and lodging taxes are not income" and "No permit, no plan."

KEY FORMULAS

$$\text{Nights booked} = 365 \times \text{occupancy}$$

$$\text{Annual revenue} = \text{ADR} \times \text{nights booked}$$

$$\text{RevPAR} = \frac{\text{revenue}}{\text{nights available}} = \text{ADR} \times \text{occupancy}$$

$$\text{Monthly rent entered in the Rental worksheet} = \frac{\text{annual revenue}}{12}$$

$$\text{Break-even revenue} = \frac{\text{fixed costs} + \text{debt service}}{1 - \text{variable cost \%}}$$

From history. The tax code has a small rule that towns with big annual events know well. Under Internal Revenue Code section 280A, if you rent out a dwelling you also use as a home for fewer than 15 days in a year, you generally do not report that rental income, and you deduct no rental expenses. Homeowners in Augusta, Georgia, who rent their houses to visitors during the Masters golf tournament each April made it famous, and many call it the "Masters exemption." IRS Publication 527 explains it.

WORKED EXAMPLES

Example 1. In this example, comparable cabins book 62% of the nights in a year at an average daily rate of $170. Find the nights booked, the annual revenue and RevPAR.

Show solution

1. Nights booked: $365 \times 0.62 = 226.3$.
2. Revenue: $226.3 \times \$170 = \$38{,}471$.
3. RevPAR: $\$170 \times 0.62 = \$105.40$ (check: $\$38{,}471 \div 365 = \$105.40$).
4. Monthly figure for the Rental worksheet: $\$38{,}471 \div 12 = \$3{,}205.92$.

Answer: About 226 nights, $38,471 a year and a RevPAR of $105.40.

Example 2. In this example, the $200,000 house above (25% down, 7%, 30 years) can be a long-term rental at $1,750 a month or a short-term rental at $38,471 a year. Use the lesson's expense assumptions to compare NOI and cash flow. (Rental worksheet, twice.)

Show solution

1. Long-term: GSI $21,000; EGI $19,740; expenses $\$2{,}400 + \$1{,}200 + \$1{,}260 + \$1{,}470 + \$1{,}776.60 = \$8{,}106.60$; NOI $11,633.40.
2. Short-term: EGI $38,471; expenses $\$2{,}400 + \$2{,}000 + \$4{,}800 + \$3{,}000 + \$3{,}077.68 + \$3{,}847.10 + \$7{,}694.20 = \$26{,}818.98$; NOI $11,652.02.
3. Debt service either way: $\$997.95 \times 12 = \$11{,}975.44$.
4. Cash flow: long-term $-\$342.04$ a year; short-term $-\$323.42$ a year, on $20,000 more cash.

Answer: Gross income nearly doubles, but NOI rises only $18.62. At this price neither version cash-flows; the verdict is to walk away or negotiate.

Example 3. In the short-term version, fixed costs are taxes $2,400, insurance $2,000, utilities $4,800 and other $3,000, plus debt service of $11,975.44; repairs, CapEx and management total 38% of revenue. Find the break-even revenue and occupancy at a $170 ADR, and the cash flow at 45% occupancy.

Show solution

1. Fixed plus debt: $\$2{,}400 + \$2{,}000 + \$4{,}800 + \$3{,}000 + \$11{,}975.44 = \$24{,}175.44$.
2. Break-even revenue: $\$24{,}175.44 \div (1 - 0.38) = \$38{,}992.65$.
3. Break-even occupancy: $\$38{,}992.65 \div (\$170 \times 365) \approx 62.8\%$.
4. At 45%: revenue $27,922.50; NOI $5,111.95; cash flow $-\$6{,}863.49$ a year.

Answer: It breaks even near 63% occupancy and loses about $572 a month at 45%. A small drop in bookings is a large drop in cash.

PRACTICE

1. Easy Define ADR and occupancy.

   Show answer

   ADR is revenue divided by nights actually booked; occupancy is nights booked divided by nights available. Together they give revenue and RevPAR.

2. Easy In this example, a cottage books 180 nights at an ADR of $210. What is its annual revenue?

   Show answer

   $180 \times \$210 = \$37{,}800$.

3. Easy Name three places to check before buying a house to use as a short-term rental.

   Show answer

   Any three of: the city or county code and permit pages, the zoning map, the HOA's CC&Rs, the state and local lodging-tax pages and an insurance agent's quote for short-term rental coverage.

4. Medium In this example, a house has an ADR of $150 and 70% occupancy. Find RevPAR and annual revenue.

   Show answer

   RevPAR $\$150 \times 0.70 = \$105$; revenue $\$105 \times 365 = \$38{,}325$.

5. Medium Why does the lesson set vacancy near 0% when modeling a short-term rental in the Rental worksheet?

   Show answer

   The revenue estimate already uses occupancy, which counts the empty nights. Adding vacancy again would count them twice.

6. Medium In this example, a host collects $9,000 of cleaning fees and $3,800 of lodging taxes from guests during a year. How much of that should be counted as the host's income in the analysis?

   Show answer

   Normally none of it: the cleaning fees pay the cleaners, and the lodging taxes are remitted to the government. Revenue in the worksheet should be the nightly rental income only.

7. Medium In this example, raising the ADR from $160 to $180 drops occupancy from 66% to 58%. Which earns more RevPAR?

Show answer

At $160: $\$160 \times 0.66 = \$105.60$. At $180: $\$180 \times 0.58 = \$104.40$. The lower price earns slightly more per available night, but it also brings more stays and more cleanings, so compare the costs before choosing.

8. Hard In this example, a short-term rental's fixed costs plus debt service are $27,000 a year and variable costs take 35% of revenue. At an ADR of $190, what occupancy breaks even?

Show answer

Break-even revenue $\$27{,}000 \div 0.65 = \$41{,}538.46$. Occupancy $\$41{,}538.46 \div (\$190 \times 365) \approx 59.9\%$.

9. Hard A city allows short-term rentals only in the owner's primary residence. Explain what that means for an investor who wants to buy a second house for nightly rental.

Show answer

The investor could not legally run the second house as a short-term rental, so its analysis must use long-term or 30-day-plus rents. Buying it on short-term numbers would be planning to break the rule, which this course rejects.

10. Hard In this example, a beach house earns $30,000 in June–August and $12,000 in the other nine months. What share of the year's revenue comes in summer, and what does that mean for reserves?

Show answer

$\$30{,}000 \div \$42{,}000 \approx 71\%$. The owner must save summer cash to pay nine months of mortgage and bills, so reserves must be larger than for a steady rental.

11. **Challenge** In the lesson's example, the short-term rental's NOI is $11,652.02 and the long-term rental's is $11,633.40, but the short-term version needs $20,000 more cash. Which is the better use of money, and why?

    Show answer

    The long-term rental: it produces almost the same NOI with $20,000 less invested, far less work, steadier income and less legal risk. The extra $20,000 could be kept as reserves or used elsewhere.

12. **Challenge** Write three sentences a careful host could say to a neighbor who is worried about a new short-term rental next door.

    Show answer

    A good answer explains that the rental has the required permit and follows the city's limits; gives the neighbor a phone number that will be answered quickly; and names specific house rules — quiet hours, a guest and car limit and trash pickup — that the host enforces.

COMMON MISTAKES

- Comparing short-term gross revenue with long-term rent and calling the difference profit. Compare NOI after the extra costs.
- Leaving utilities, internet, supplies and furnishing at zero. A host pays them all; put furnishing in upfront repairs.
- Counting cleaning fees and lodging taxes as income. They pass through to cleaners and the government.
- Using the best summer weeks for a full year's occupancy. Build revenue season by season from comparable calendars.
- Skipping the permit, zoning and HOA check. A rental that is not allowed has no value as a short-term rental.
- Insuring a nightly rental on a homeowner's policy. Policies commonly exclude business use; get coverage written for short-term rental.

Make it a game · Book the Season. Each player owns the lesson's $170-a-night cabin. Deal four season cards (summer, fall, winter, spring); for each, roll two dice, double the total and add 50 to get the percent of that season's 91 nights booked (a roll of 7 gives 64%). Before rolling, each player may set a price: $150 (add 8 points of occupancy) or $190 (subtract 8). Total the year's nights and revenue, then subtract $24,175 of fixed costs and debt and 38% of revenue. Highest cash flow wins; anyone who loses money explains which season hurt.

Scripture. "Render therefore to all their dues: tribute to whom tribute is due; custom to whom custom; fear to whom fear; honour to whom honour." (Romans 13:7, KJV)

Paul tells believers to pay what is owed — taxes, duties, respect — to those who have a right to them. A short-term host collects lodging taxes that belong to the government, needs permits the city requires and owes the neighbors honor and peace. Paying all these dues is not a cost of doing business to be minimized by tricks; it is part of doing business honestly.

7.4 Mid-Term Rentals and Furnished Housing

OBJECTIVES

- Define a mid-term rental and place it between short-term and long-term rentals on stay length, revenue, costs, rules and work.
- Convert expected stays and gaps between them into a vacancy rate, and model a furnished 30-plus-day rental in the Rental worksheet.
- Identify the demand drivers for furnished monthly housing — hospitals, employers, universities, military bases and insurance housing — and research them for a real town.
- Explain why landlord–tenant law, fair housing and lease rules generally apply to stays of 30 days or more, and name the documents a mid-term lease needs.
- Compare a mid-term rental with long- and short-term versions of the same house and defend a choice with numbers.

> **Warm-up.** A traveling nurse needs a furnished place near a hospital for three months. Make two lists: what she would need in the home on the day she arrives, and what she would not want to pay for in a hotel. Circle anything on either list that would cost a landlord money.

WATCH

Medium-Term Rentals 101: A Better Bet Than Vacation Rentals?

BiggerPockets · 10:05

https://www.youtube.com/watch?v=OH611iLDBKs

> **WHEN TO WATCH**
> Watch after the third core idea. List each advantage she gives for medium-term rentals, and beside each write the cost or risk from this lesson that goes with it.

BACKUP VIDEO

Cracking the Code: Analyzing Mid-Term Rentals in Your Local Travel Nurse Market

Al Williamson - LeadingLandlord · 10:59

https://www.youtube.com/watch?v=8C1F96ML7ec

Watch during the project. Copy his steps for estimating demand in a local market, and use them for the area around your house.

KEY TERMS

mid-term rental (MTR)

A furnished rental for stays of roughly one to several months, commonly 30 days or more, also called a medium-term or furnished monthly rental.

furnished rental

A dwelling rented with furniture, kitchenware, linens and usually utilities and internet included in the rent.

corporate housing

Furnished apartments or houses rented to companies for employees on relocation, training or temporary assignment.

insurance housing

Temporary furnished housing paid for by an insurance company for a family whose home was damaged by fire, flood or another covered loss.

travel nurse

A nurse who takes temporary assignments at hospitals away from home, commonly about thirteen weeks long, and needs furnished housing for that time.

fixed-term lease

A lease for a set period with a stated start and end date, such as a three-month furnished lease.

turnover

The work and cost of preparing a unit between one occupant and the next: cleaning, repairs, restocking and marketing.

gap (vacancy) days

Days between one stay's end and the next stay's start when a furnished rental earns nothing.

lead-based paint disclosure

The federal requirement that landlords of most pre-1978 housing give tenants the EPA pamphlet and disclose known lead-based paint before a lease is signed.

transient occupancy

A stay short enough to be treated like a hotel stay rather than a tenancy; in many places stays under 30 days are treated this way.

CORE IDEAS

The story. In the 1820s and 1830s, textile companies built the mill city of Lowell, Massachusetts, and recruited thousands of young women from New England farms

to work their looms for months or years at a time. The workers needed a place to live that was neither a hotel nor a home of their own, so the companies built rows of boardinghouses and hired "keepers," usually respectable widows, to run them. A keeper had to be fairly well-off, because she was required to furnish the house herself — tables, chairs, beds, linens, cookware and tableware for up to thirty people. She served three meals a day, cleaned and did the laundry, kept accurate accounts and saw that the women kept the companies' rules, including a ten o'clock curfew and church on Sunday. In 1834, according to the National Park Service, the corporation paid her $1.25 per boarder, deducted from the worker's wages, plus $.25 more per boarder from the corporation itself. Out of that she paid for food, fuel and furniture, and whatever was left was her profit.

How they figured it out. The Lowell keepers ran the same business a mid-term landlord runs today: furnished housing for people who come to a place to work for a season. Over the twentieth century the need took new forms. Residential hotels and furnished rooms housed workers in growing cities. Companies began renting furnished apartments as **corporate housing** for employees on relocation or training. Hospitals began filling staffing gaps with **travel nurses** on contracts commonly about thirteen weeks long. Insurance companies began paying for furnished homes for families displaced by fires and floods. In the 2010s, websites made it easy for small owners to list furnished homes by the month, and investors began calling the strategy the **mid-term rental**: furnished like a vacation rental, but leased for 30 days or more like a conventional rental. BiggerPockets authors Zeona McIntyre and Sarah Karakaian wrote a book on it, *30-Day Stay*.

The big idea. A mid-term rental sits between the other two. Compared with a long-term rental, it earns a higher monthly rent because it is furnished and includes utilities, but it has more **gap days** between stays, more turnovers, furniture to buy and replace, and more management. Compared with a short-term rental, it has far fewer turnovers, steadier income, lower cleaning and supply costs and, in many places, fewer special permits and lodging taxes, because stays of 30 days or more are commonly treated as tenancies rather than **transient occupancy**. That last point cuts both ways: a mid-term guest is usually a tenant under your state's landlord–tenant law, with a written lease, a deposit governed by state rules and the right to proper notice — and if a tenant will not leave when the lease ends, removing them takes the

court process of Lesson 8.4, not a call to the platform. Check your own state's rules on where a stay becomes a tenancy.

Vacancy for a furnished rental comes from gaps. In this example, a home near a hospital rents to nurses on 13-week contracts, and it usually takes two weeks to clean, restock and fill between them. Each cycle is $13 + 2 = 15$ weeks, so occupancy is $13 \div 15 = 86.7\%$ and vacancy 13.3%. In the Rental worksheet, use the lesson's $200,000 house (25% down, 7%) furnished at $2,900 a month with utilities included, 12% vacancy, taxes $2,400, insurance $1,600, owner-paid utilities and internet $300 a month, other expenses $100 a month for supplies and listing fees, repairs 7%, CapEx 9% for furniture and wear, management 10%, and $15,000 of furnishing in upfront repairs. GSI is $34,800, EGI $30,624, operating expenses $17,430.40 and NOI $13,193.60. After debt service of $11,975.44, cash flow is $1,218.16 a year, about $102 a month, on $70,000 invested — better than the same house's long-term NOI of $11,633.40, but only if the gaps stay short.

Demand is local and specific. Mid-term tenants come from hospitals (especially large ones that use traveling staff), universities and research centers, military bases, construction and industrial projects, corporate offices and insurance claims after disasters. Before buying, list the employers within a short drive, look at how many furnished monthly listings already compete, and read their rents and how long they stay listed. The home must suit the tenant: quiet, clean, safe, fast internet, a real workspace, laundry, parking, a fully equipped kitchen and a location near the work. Screening still applies: use written criteria applied to every applicant (Lesson 8.1), and remember that fair housing law covers the rental of a dwelling whether it is furnished or not. Many mid-term tenants are paid partly through stipends or by companies, so verify income and who signs the lease.

Paperwork matters. A mid-term lease should state the dates, rent, deposit, what utilities and furnishings are included (an inventory with photos protects both sides), house rules, the entry-notice policy, what happens if the tenant needs to leave early (for example, when a contract is canceled) and how to extend. For homes built before 1978, the federal lead-based paint disclosure applies to leases longer than 100 days and to shorter ones that can be renewed or extended — so a three-month nurse lease with an extension option needs the EPA pamphlet and disclosure form. Security deposits, entry notice and ending the tenancy all follow state law. Insurance should be written for a furnished rental. Some cities treat stays under 30 days as

short-term rentals, so keeping every stay at 30 days or more is part of following the rules, not a loophole to be stretched.

Run the numbers. Model a mid-term rental in the Rental worksheet: furnished monthly rent from comparable furnished listings (not unfurnished rents); vacancy from stays and gaps, commonly 10–25% in this example range; owner-paid utilities and internet; other expenses for supplies, cleaning between stays and listing fees; repairs and CapEx a few points above a long-term rental; management at the rate a local manager charges for furnished rentals (or your own time valued honestly); and furnishing in upfront repairs. Then stress vacancy: in this example, at 25% vacancy NOI falls to $9,122 and cash flow to about −$238 a month. Compare three versions of the same house — long-term, mid-term and short-term — and choose on NOI, cash needed, work and risk. The classic mistakes: using a single long assignment as the whole year; forgetting that utilities are included; using unfurnished comparables; and treating a mid-term tenant as a hotel guest who can be told to leave without notice.

PICTURE STUDY



New England Factory Life — "Bell-Time", Winslow Homer (wood engraving published in *Harper's Weekly*), July 25, 1868 · Wood engraving · The Metropolitan Museum of Art, New York; public domain
Image: Wikimedia Commons, public domain

Winslow Homer began as a magazine illustrator, drawing scenes of American life for *Harper's Weekly* before he became one of the country's great painters. In "Bell-Time" he drew the moment the mill bell ends a shift in a New England factory town, and the workers — many of them young women, some of them children — stream out carrying their lunch pails. They had come to the mill town for work and needed somewhere to live for months at a time. That need is the root of the mid-term rental: housing for people who come to a place for a season of work.

Look closely

- Find the tin lunch pails nearly everyone carries. These workers were away from their family homes; someone had to provide their meals and beds.
- Look at the long mill buildings across the river. A big employer is the first thing a mid-term landlord looks for on a map.
- Notice the range of ages in the crowd, from boys to older women. Furnished housing has always served many kinds of people; today, fair housing law protects them all.
- Study the tired faces. A good furnished rental is a place of rest — quiet, clean and safe — not just a bed.

Talk about it

1. What would a worker in this crowd have needed from a boardinghouse keeper, and what does a traveling nurse need from a mid-term landlord today?
2. How would a mill closing or a hospital ending its use of traveling staff affect a mid-term rental near it? What does that say about relying on one employer?
3. Hebrews 13:2 urges hospitality to strangers. How can a landlord running a business still treat temporary tenants with the care of a good host?

PROJECT

The Furnished-Rental Market Map

You will research the furnished monthly rental market around one real house and model it as a mid-term rental. The work is all online and pretend; contact no landlord, hospital or employer.

You will need

- A real for-sale listing within a short drive of a hospital, university, base or large employer
- A map website, and public furnished-monthly and unfurnished rental listings
- Your state's landlord–tenant statute or attorney general's landlord–tenant guide
- The Deal Analyzer's Rental worksheet and your Lesson 7.3 analysis, if it is the same house

Steps

1. On a map, mark the house and every large employer, hospital, university or base within about 20 minutes. List them with their distance.
2. Find at least five comparable furnished monthly listings and five unfurnished rentals. Record their rents, sizes, what is included and how long they have been listed.
3. Estimate a typical stay and gap for this market and compute the vacancy rate with the lesson's formula.
4. Build a furnishing budget room by room (bed, linens, kitchen, desk, internet setup) using store prices as examples, and enter it as upfront repairs.
5. Run the Rental worksheet as a mid-term rental with the lesson's conversions, then again at 10 points more vacancy. Print both, plus a long-term version with unfurnished rent.
6. From your state's official landlord–tenant source, write three rules that would apply to a 90-day furnished lease (for example, deposit limits, return deadline, notice to end the tenancy), with the source and date.

7. Write a one-paragraph verdict — long-term, mid-term or walk away — and file the worksheets and map in your deal binder.

INVESTOR'S NOTEBOOK

1. Make flashcards for the key terms, plus one card comparing short-, mid- and long-term rentals on stay length, rent, turnover and rules.
2. Draw a 52-week strip calendar and shade four 13-week stays with two-week gaps between them. Count the shaded weeks and compute occupancy.
3. Write a trap list titled "Furnished monthly rentals," including "Use furnished comps, not unfurnished," "Utilities are on you" and "A 30-day tenant is still a tenant."

KEY FORMULAS

$$\text{Occupancy} = \frac{\text{weeks of each stay}}{\text{weeks of each stay} + \text{gap weeks}} \qquad \text{Vacancy} = 1 - \text{occupancy}$$

$$\text{GSI} = \text{furnished monthly rent} \times 12 \qquad \text{EGI} = \text{GSI} \times (1 - \text{vacancy})$$

$$\text{NOI} = \text{EGI} - \text{operating expenses (utilities, furnishing reserve and management included)}$$

$$\text{Cash invested} = \text{down payment} + \text{closing} + \text{furnishing and setup}$$

From history. From 1840 to 1845 some of the Lowell mill women published their own magazine, *The Lowell Offering*, filled with stories, essays and poems written in the evenings after their long shifts. It became famous on both sides of the Atlantic as proof that factory workers could be thoughtful writers. Its pages describe boardinghouse life — crowded rooms, shared meals, keepers' rules — and remain one of the best records of what furnished worker housing was like.

WORKED EXAMPLES

Example 1. In this example, a furnished home rents to travel nurses on 13-week contracts, with a typical 2-week gap between them. Find the occupancy and vacancy rates.

Show solution

1. One cycle: $13 + 2 = 15$ weeks.
2. Occupancy: $13 \div 15 = 0.867 = 86.7\%$.
3. Vacancy: $1 - 0.867 = 13.3\%$; enter about 13% in the worksheet.
4. If gaps stretch to 4 weeks: $13 \div 17 = 76.5\%$ occupancy, 23.5% vacancy.

Answer: About 87% occupied and 13% vacant with two-week gaps; about 24% vacant if gaps double.

Example 2. In this example, the $200,000 house (25% down, 7%, 30 years; debt service $11,975.44) is furnished for $15,000 and rented at $2,900 a month with 12% vacancy; taxes $2,400, insurance $1,600, utilities $300 a month, other $100 a month, repairs 7%, CapEx 9%, management 10%; closing $5,000. Find NOI, cash flow and cash-on-cash. (Rental worksheet.)

Show solution

1. GSI $\$2{,}900 \times 12 = \$34{,}800$; vacancy $4,176; EGI $30,624.
2. Expenses: $\$2{,}400 + \$1{,}600 + \$3{,}600 + \$1{,}200 + \$2{,}436 + \$3{,}132 + \$3{,}062.40 = \$17{,}430.40$.
3. NOI $\$30{,}624 - \$17{,}430.40 = \$13{,}193.60$; cash flow $\$13{,}193.60 - \$11{,}975.44 = \$1{,}218.16$.
4. Cash invested $\$50{,}000 + \$5{,}000 + \$15{,}000 = \$70{,}000$; cash-on-cash $\$1{,}218.16 \div \$70{,}000 = 1.7\%$.

Answer: NOI $13,193.60, cash flow about $102 a month, cash-on-cash 1.7% — positive, but thin.

Example 3. Using the same house, rerun the mid-term rental at 25% vacancy and compare it with the long-term version (NOI $11,633.40, cash flow −$342.04 a year).

Show solution

1. Vacancy $0.25 \times \$34{,}800 = \$8{,}700$; EGI $26,100.
2. Management falls with EGI: $0.10 \times \$26{,}100 = \$2{,}610$; expenses $16,978.
3. NOI $\$26{,}100 - \$16{,}978 = \$9{,}122$; cash flow $\$9{,}122 - \$11{,}975.44 = -\$2{,}853.44$.
4. Compare: the long-term rental's NOI of $11,633.40 now beats the mid-term rental by $2,511.40.

Answer: At 25% vacancy the mid-term rental loses about $238 a month and earns less than the long-term rental. Its advantage depends on short gaps.

PRACTICE

1. Easy How does a mid-term rental differ from a short-term rental?

   Show answer

   It rents for 30 days or more instead of by the night, with fewer turnovers and steadier income. Stays of that length are commonly treated as tenancies under landlord–tenant law.

2. Easy Name four sources of mid-term tenants.

   Show answer

   Any four of: traveling nurses and other medical staff, relocating or training employees, students and researchers, military members, construction and project workers and families in insurance housing.

3. Easy Why should a mid-term rental be analyzed with furnished comparables?

   Show answer

   Furnished rentals with utilities included rent for more than unfurnished ones. Using unfurnished rents would understate income; using furnished rents for an unfurnished unit would overstate it.

4. **Medium** In this example, stays average 10 weeks with 3-week gaps. What vacancy rate should be used?

Show answer

Occupancy $10 \div 13 = 76.9\%$; vacancy 23.1%.

5. **Medium** In this example, a furnished unit rents for $2,400 a month with 15% vacancy. Find GSI and EGI.

Show answer

GSI $\$2{,}400 \times 12 = \$28{,}800$; EGI $\$28{,}800 \times 0.85 = \$24{,}480$.

6. **Medium** A landlord of a 1955 house offers a 13-week furnished lease with an option to extend. Must she give the federal lead-based paint disclosure? Explain.

Show answer

Yes. The exemption covers only leases of 100 days or less with no possibility of renewal or extension; this lease can be extended, so the pamphlet and disclosure are required.

7. **Medium** Why does a mid-term landlord usually pay the utilities, and how should that appear in the Rental worksheet?

Show answer

Furnished monthly tenants expect a ready home with utilities and internet included, as in a hotel. Enter the monthly total as owner-paid utilities.

8. **Hard** In this example, a mid-term rental's NOI is $14,000 and debt service is $12,600. A long-term version would have NOI of $12,100. The mid-term version needed $16,000 of furnishing. Compare the annual cash flows and how long the extra cash flow takes to repay the furnishing.

Show answer

Mid-term cash flow $\$1{,}400$; long-term $-\$500$. The difference is $\$1{,}900$ a year, so the furnishing takes about $\$16{,}000 \div \$1{,}900 \approx 8.4$ years to repay — longer than the furniture may last.

9. Hard A mid-term tenant's contract is canceled and she wants to leave after 5 weeks of a 12-week lease. What should the lease have said, and what governs the outcome?

Show answer

A good lease states an early-termination policy in advance, such as notice and a fee or rent until a replacement is found. The lease terms and the state's landlord–tenant law (including any duty to try to re-rent) govern what is owed.

10. Hard Explain why a landlord must not simply change the locks when a mid-term tenant stays past the lease end.

Show answer

A tenant under a 30-day-plus lease generally has the protections of landlord–tenant law, and self-help lockouts are illegal in nearly every state. The landlord must give lawful notice and, if needed, go through the court eviction process.

11. Challenge In the lesson's example, at what vacancy rate does the mid-term rental's NOI fall to the long-term rental's $11,633.40? (Hint: each point of vacancy cuts EGI by $348 but also cuts management by 10% of that.)

Show answer

Each point of vacancy lowers NOI by $\$348 \times 0.90 = \$313.20$. NOI must fall $\$13{,}193.60 - \$11{,}633.40 = \$1{,}560.20$, or about $1{,}560.20 \div 313.20 \approx 5.0$ points, so at about 17% vacancy the advantage is gone.

12. Challenge A town has one large hospital and no other big employers. Write three sentences on the risk to a mid-term investor there and one way to reduce it.

Show answer

Demand depends on one employer's staffing decisions, so a hiring change, a new staff dormitory or a recession could empty the market. Rents and gaps would worsen together. The investor can reduce the risk by buying only a property that also works as a long-term rental with unfurnished rent.

COMMON MISTAKES

- Using one long assignment as the whole year. Compute vacancy from realistic stays and gaps.

- Comparing furnished rent with unfurnished expenses. Include utilities, internet, supplies and a furnishing reserve.
- Forgetting furnishing in cash invested. Enter it as upfront repairs so cash-on-cash is honest.
- Treating a 30-plus-day tenant like a hotel guest. Landlord–tenant law, deposits, notice and the court process generally apply.
- Skipping the lead-based paint disclosure for pre-1978 homes. Only leases of 100 days or less with no renewal or extension are exempt.
- Depending on a single employer. Check whether the house also works as a long-term rental.

Make it a game · Gaps and Stays. Draw a 52-week strip on a long sheet of paper. Players take turns drawing cards from a deck: number cards 2–10 are the weeks of a stay (face cards count as 13-week nurse contracts), and after each stay the player rolls one die for gap weeks (1–2 = one week, 3–4 = two, 5 = three, 6 = four). Shade stays and gaps until the year is full. Count the occupied weeks, compute occupancy and multiply by $2,900 ÷ 4.33 per week. Highest revenue wins, but the winner must explain one thing a landlord could do to shorten gaps.

Scripture. "Be not forgetful to entertain strangers: for thereby some have entertained angels unawares." (Hebrews 13:2, KJV)

A mid-term rental is a business, and a landlord rightly charges rent for it. But its tenants are strangers far from home — nurses, workers, families whose house has burned — and the command to welcome strangers shapes how a Christian landlord serves them: a clean, safe, honest home, fair dealing and kindness when plans change.

7.5 One House, Five Strategies

OBJECTIVES

- Analyze one property as a long-term rental, a house hack, a BRRRR, a flip and a short-term rental, using the matching Deal Analyzer worksheet for each.
- Compare the five strategies on cash needed, monthly cash flow or profit, time and skill required and risk, in a single table.
- Apply the four tests of highest and best use to choose which strategies are legally and practically possible for a property.
- Build a weighted decision matrix that matches a strategy to an investor's goals, money, time and stage of life.
- Write and defend a one-page decision memo that recommends one strategy, a price and a backup exit — or recommends walking away.

> **Warm-up.** Think of one house on your street. In five minutes, write five different ways someone could make money from it — or lose money on it. For each, write one sentence about who would be the best person to try it and who should not.

WATCH

Flipping Houses vs. Rentals: Which Will Make You Richer TODAY?

BiggerPockets · 17:18

https://www.youtube.com/watch?v=y9QeMv7bU58

> **WHEN TO WATCH**
> Watch after the third core idea. Copy his side-by-side comparison of flipping and holding, and circle each assumption (tax treatment, appreciation, time) you would check before believing it.

BACKUP VIDEO

Should I Invest in a Short Term Rental or Long Term Rental? [Ask Coach]

Coach Carson · 11:16

https://www.youtube.com/watch?v=S4yDHmIBcZE

Watch while you build your decision matrix. He asks about objectives and timeline before choosing; write his questions and answer them for the buyer in your memo.

KEY TERMS

highest and best use

The reasonably probable use of a property that is legally permissible, physically possible, financially feasible and maximally productive.

strategy fit

How well an investment strategy matches the investor's cash, credit, time, skills, risk tolerance and goals.

cash needed (total cash invested)

All the cash an investor must bring to a deal: down payment, closing costs, rehab, furnishing and reserves not covered by a loan.

opportunity cost

The benefit given up by choosing one use of money or time instead of the next best use.

decision memo

A short written recommendation that states the choice, the numbers that support it, the risks and the backup plan.

exit strategy

The planned way an investor will realize a return or leave a deal — selling, renting, refinancing or holding — including backup plans.

decision matrix

A table that scores options against weighted criteria so that a choice is made on stated reasons rather than impulse.

risk-adjusted return

A return judged together with the chance and size of a loss, so that a safer smaller return can beat a riskier larger one.

active vs. passive involvement

How much of the investor's own time and work a strategy demands; no rental is fully passive.

CORE IDEAS

The story. Around 1680 a timber house was built in Boston's North End, on the lot where Increase and Cotton Mather's house had burned in the fire of 1676; a merchant named Robert Howard is its earliest known owner. On January 13, 1770, a silversmith named Paul Revere bought it for just over 213 Massachusetts pounds, and in April 1775 he left from there on his famous ride. In May 1780 Revere moved

his family out and began renting the house to tenants; in 1800 he sold it. For the next century the same house served one use after another. From the 1820s to the 1850s sailors lodged there. After 1867 Catherine Wilkie ran it as a boarding house. In the 1880s and 1890s its ground floor was cut into shops — a shoe store, a cigar shop, a grocery — while a cigar maker worked upstairs. In December 1902 a Revere descendant, John P. Reynolds Jr., bought it to save it; the architect Joseph Everett Chandler restored it in 1907 and 1908, and on April 18, 1908, it opened as a museum. One house had been a family home, a rental, a sailors' lodging, a boarding house, a row of shops and a museum.

How they figured it out. Appraisers have long asked what use of a property makes it worth the most. They answer with four tests, applied in order, called **highest and best use**: is the use **legally permissible** (zoning, permits, HOA rules); **physically possible** (size, layout, condition); **financially feasible** (does it earn more than it costs); and **maximally productive** (of the feasible uses, which yields the most). Small investors borrowed the idea and gave it their own name: running a property through every **exit strategy** before buying. A house that fails as a flip may succeed as a rental; one that cannot cash-flow as a rental may be a fine home to house hack; a short-term rental may be illegal on that street. The BiggerPockets community's habit of analyzing one deal several ways teaches a deeper lesson too: the best strategy is not always the one with the biggest number, but the one that fits the investor.

The big idea. The same house can be five different investments, each with its own cash needed, return, time, skill and risk — so the choice depends on both the property and the person. A long-term rental needs a large down payment and gives slow, steady cash flow with modest work. A house hack uses an owner-occupant loan with a small down payment, cuts the owner's housing cost and demands living with tenants. A BRRRR needs cash or short-term financing for the purchase and rehab, skill to manage a renovation and an appraisal high enough to refinance. A flip earns a lump sum, is taxed as ordinary income and carries the most market and timing risk. A short-term rental can raise gross income but requires permission, furniture and constant management. A good analysis runs all five with honest numbers, rules out the illegal and impossible, compares the rest side by side and then asks who is buying: their money, time, skills and stage of life.

In this example, a dated four-bedroom house is listed at $210,000. It needs a $35,000 rehab, after which it should appraise at $280,000; it would rent for $2,100 a month, or

its rooms for $725 each. Taxes are $2,600, insurance $1,300. **Long-term rental** (Rental worksheet; 25% down at 7%, closing $5,000, 6% vacancy, repairs 6%, CapEx 7%, management 9%): cash needed $\$52{,}500 + \$5{,}000 + \$35{,}000 = \$92{,}500$; NOI $14,380.08; cash flow $1,805.86 a year, about $150 a month; cash-on-cash 2.0%; DSCR 1.14. **House hack** (House hack worksheet; 5% down at 6.75%, mortgage insurance $120 a month, the owner in one bedroom and three rooms rented at $725 with 8% vacancy, $250 a month of utilities): the owner's net monthly housing cost is $364.95 — about $360 less than renting a room — and about $177 a month of the payment is first-year principal. Cash needed is $15,500 plus the $35,000 rehab, unless a renovation loan covers it.

BRRRR (BRRRR worksheet; bought with cash, 5 months of $600 holding, refinance at 75% of $280,000 at 7.25% with $5,000 closing): all-in cost $\$210{,}000 + \$5{,}000 + \$35{,}000 + \$3{,}000 = \$253{,}000$; refinance loan $210,000; cash out $205,000; cash left in $48,000. But the new payment of $1,432.57 a month against the same NOI leaves cash flow of $-\$2{,}810.76$ a year and a DSCR of 0.84 — the refinance pulls out cash the rent cannot support. **Flip** (Fix & flip worksheet; 2% closing, 10% contingency, 5 months, 85%/100% financing at 11% with 2 points, 8% selling): total cost $292,385.83 and a **loss** of $12,385.83; the 70% rule ceiling is $\$280{,}000 \times 0.70 - \$35{,}000 = \$161{,}000$, far below the $210,000 list price. A flip works here only at a much lower price.

Short-term rental (Rental worksheet with the Lesson 7.3 conversions; ADR $165 at 55% occupancy, $20,000 of furnishing, insurance $2,100, utilities $400 and other $250 a month, repairs 8%, CapEx 10%, management 20%): revenue $365 \times 0.55 \times \$165 = \$33{,}123.75$; NOI $8,036.73; cash flow $-\$4{,}537.49$ a year on $112,500 of cash — and only if the city and any HOA allow it. Put the five side by side. The flip and the short-term rental lose money; the BRRRR returns most of its cash but cannot carry its loan; the long-term rental is safe but thin; the house hack cuts a young owner's housing cost sharply on the least cash. For a single young adult willing to live with housemates, the house hack fits best. For a family that will not share a house, the honest answer may be the long-term rental at a lower price — or walking away. A mid-term version could be run the same way with furnished monthly rent.

Run the numbers. For this lesson you use every worksheet in the Deal Analyzer. Keep the property facts identical across all five — the same price, rehab, ARV, rents, taxes and insurance — and change only what the strategy changes: loan type and down payment, who lives there, furnishing, management and time. Print every

worksheet and copy five numbers from each into one comparison table: cash needed, monthly cash flow (or flip profit), cash-on-cash or return on cash, DSCR where there is a loan, and months until the strategy is "done." Then rule out any strategy that fails a legal test, and score the rest in a decision matrix weighted by what matters to the buyer. The classic mistakes: changing the rent or ARV between strategies to make a favorite look better; choosing the strategy with the biggest gross number; ignoring the owner's time and skills; and forgetting that "walk away" is also a strategy — usually the right one at the asking price.

PICTURE STUDY



Paul Revere House, North Square, North End, Unknown photographer, 1898 · Photographic print · Boston Public Library, Print Department; public domain

Image: Wikimedia Commons, public domain

This photograph was taken in 1898, four years before John P. Reynolds Jr. bought the house to save it. It shows the Paul Revere House not as a museum but as a working building: shopfronts cut into its ground floor, signs in the windows and neighbors crowded close on every side. By then it had been a family home, a rental, a sailors' lodging and a boarding house. It opens this lesson because it shows plainly that one house can be put to many uses — and that each use changes what the house earns and what it asks of its owner.

Look closely

- Find the shopfronts on the ground floor. Each one was a separate rent — a strategy very different from a single family's home.
- Read what you can of the signs, such as the one advertising repairing. Small tradesmen were the tenants; their rent was the building's income.
- Compare the old house with the taller buildings beside it. Neighbors had built up to use their lots more intensely — another way of seeking the highest and best use.
- Look at the people on the sidewalk. Every strategy for a property serves real people — tenants, customers, neighbors — and a good owner keeps them in view.

Talk about it

1. List the uses this house has had. Which would you call a long-term rental, a short stay, a mixed-use building and an owner-occupied home?
2. Why might the owner in 1898 have chosen shops on the ground floor? What would you need to know to test whether that was its highest and best use?
3. Reynolds bought the house to preserve it, not to earn the most from it. When is it right to choose a use that earns less because it serves something more important?

PROJECT

One Listing, Five Worksheets and a Decision Memo

This is the unit's capstone project. You will choose one real listing and analyze it five ways in the Deal Analyzer, compare the results and write a one-page decision memo defending a single recommendation — including walking away if that is the honest answer. All purchases are pretend; contact no seller, agent or lender.

You will need

- One real listing that needs some work and has at least three bedrooms (or is a 2–4 unit building)
- Your rent, room-rent, furnished-rent, short-term and sold comparables from Lessons 7.1–7.4 or new ones for this listing
- The local short-term rental rules and zoning for the address
- All four Deal Analyzer worksheets, a spreadsheet and your deal binder

Steps

1. Fix the property facts once: price, rehab, ARV, rent, room rents, furnished rent, short-term ADR and occupancy, taxes and insurance. Write them at the top of a page and do not change them between strategies.
2. Run the four tests of highest and best use. Cross out any strategy that is not legally permissible or physically possible here, and say why.
3. Run each remaining strategy in its worksheet: Rental (long-term, and short-term with the Lesson 7.3 conversions), House hack, BRRRR and Fix & flip. Print each one.
4. Build a comparison table with cash needed, monthly cash flow or flip profit, return on cash, DSCR where there is a loan, months of active work and the main risk.
5. Choose four or five criteria and weights that fit a stated buyer (for example, "a 22-year-old with $25,000 who will live there"), score each strategy 1–5 and total the decision matrix.

6. Find the price at which your top strategy meets your standard (for example, positive cash flow after reserves, or a flip profit of at least 10% of ARV after stress tests).
7. Write a one-page decision memo: the recommendation, the offer price, the three numbers that decided it, the two biggest risks and the backup exit. File it with all five worksheets in your deal binder.

INVESTOR'S NOTEBOOK

1. Make flashcards for the key terms and a card listing the four tests of highest and best use in order.
2. Draw the lesson's five-strategy comparison table from memory, then check it against the lesson and correct it in a second color.
3. Write a trap list titled "Choosing a strategy," including "Same facts for every strategy," "Biggest gross is not best" and "Walk away is a strategy."

KEY FORMULAS

Long-term: cash flow $=$ NOI $-$ debt service
House hack: housing cost $=$ P&I $+$ MI $+$ fixed costs $+$ reserves $-$ rent from others
BRRRR: cash left in $=$ (all-in cost $-$ short-term loan) $-$ (refinance loan $-$ payoff $-$ refinance closing)
Flip: profit $=$ ARV $-$ total cost STR: revenue $=$ ADR $\times$ 365 $\times$ occupancy
Decision score $=$ $\sum$(weight $\times$ score on each criterion)

From history. When the Paul Revere Memorial Association bought the house in 1907 for $12,200, it chose April 18, 1908 — the 133rd anniversary of the night of Revere's ride — for the opening. The house is the oldest remaining building in downtown Boston, and it survived largely because each owner in turn found a use that paid for its upkeep. The building's history is a reminder that a property's use can change many times while the structure stays.

Example 1. In this example, the $210,000 house needs $35,000 of work and rents for $2,100. Compare the long-term rental (25% down at 7%, closing $5,000) with the room house hack (5% down at 6.75%, MI $120, three rooms at $725 with 8% vacancy, owner's room worth $725). Use the lesson's expenses.

Show solution

1. Long-term (Rental worksheet): loan $157,500, P&I $1,047.85; EGI $23,688; expenses $9,307.92; NOI $14,380.08; cash flow $1,805.86 a year on $92,500.
2. House hack (House hack worksheet): loan $199,500, P&I $1,293.95; fixed costs $(\$2{,}600 + \$1{,}300) \div 12 + \$250 = \$575$; reserves $\$2{,}900 \times 0.13 = \$377$; rent in $\$2{,}175 \times 0.92 = \$2{,}001$.
3. Housing cost: $\$1{,}293.95 + \$120 + \$575 + \$377 - \$2{,}001 = \$364.95$ a month.
4. Compared with renting a room for $725, the owner saves $360.05 a month and pays down about $\$2{,}126.17 \div 12 = \$177.18$ of principal.

Answer: The long-term rental earns about $150 a month on $92,500; the house hack saves the owner about $360 a month on $15,500 plus the rehab. For a buyer willing to share a house, the house hack fits better.

Example 2. In this example, the same house is bought with cash as a BRRRR: price $210,000, closing $5,000, rehab $35,000, 5 months of $600 holding; refinance at 75% of a $280,000 appraisal, 7.25%, 30 years, $5,000 closing. NOI as a rental is $14,380.08. Find the cash left in, the cash flow and the DSCR. (BRRRR worksheet.)

Show solution

1. All-in: $\$210{,}000 + \$5{,}000 + \$35{,}000 + \$3{,}000 = \$253{,}000$; cash in $\$253{,}000$ (no short-term loan).
2. Refinance loan $0.75 \times \$280{,}000 = \$210{,}000$; cash out $\$210{,}000 - \$0 - \$5{,}000 = \$205{,}000$; cash left in $\$48{,}000$.
3. New P&I $\$1{,}432.57$ a month; debt service $\$17{,}190.84$.
4. Cash flow $\$14{,}380.08 - \$17{,}190.84 = -\$2{,}810.76$; DSCR $\$14{,}380.08 \div \$17{,}190.84 = 0.84$.

Answer: Only $48,000 stays in the deal, but the property loses about $234 a month on the new loan. Refinancing less (for example, 65% of value) or buying lower would be required.

Example 3. Score the five strategies for a 20-year-old single buyer who will live in the house, using four equally weighted criteria scored 1 (poor) to 5 (good): cash needed, monthly benefit, risk and time demand. Use the lesson's results.

Show solution

1. Long-term rental: cash 2, benefit 2, risk 4, time 4 — total 12.
2. House hack: cash 5, benefit 4, risk 4, time 2 — total 15.
3. BRRRR: cash 3, benefit 1, risk 2, time 2 — total 8; flip: cash 3, benefit 1, risk 1, time 1 — total 6.
4. Short-term rental: cash 1, benefit 1, risk 2, time 1 — total 5, and it must first pass the legal test.

Answer: The house hack scores highest (15), then the long-term rental (12). The memo should recommend the house hack at or below a stated price, with the long-term rental as the move-out plan.

PRACTICE

1. Easy List the four tests of highest and best use in order.

Show answer

Legally permissible, physically possible, financially feasible and maximally productive. A use that fails an earlier test is ruled out before the later ones are considered.

2. Easy Which Deal Analyzer worksheet would you use for each strategy: long-term rental, house hack, BRRRR, flip, short-term rental?

Show answer

Rental; House hack; BRRRR; Fix & flip; and Rental again for the short-term rental, using revenue ÷ 12 as rent and short-term expenses.

3. Easy Why must the property facts stay the same across all five worksheets?

Show answer

Only then do the differences come from the strategy itself. Changing the rent or ARV between strategies hides the truth and lets a favorite win unfairly.

4. Medium In this example, a house's ARV is $240,000 and the rehab is $30,000. What is the 70% rule ceiling, and should a flipper pay its $190,000 list price?

Show answer

$\$240{,}000 \times 0.70 - \$30{,}000 = \$138{,}000$. The list price is $52,000 over the ceiling, so as a flip it should be walked away from or offered far lower.

5. Medium In this example, a BRRRR's all-in cost is $200,000 bought with cash; the refinance is 75% of a $250,000 appraisal with $4,000 closing. How much cash is left in?

Show answer

Refinance $187,500; cash out $\$187{,}500 - \$4{,}000 = \$183{,}500$; cash left in $\$200{,}000 - \$183{,}500 = \$16{,}500$.

6. Medium In this example, a house hacker's P&I is $1,400, MI $110, fixed costs $520, reserves $330 and rent from housemates $1,850 a month. What is her net housing cost?

Show answer

$\$1{,}400 + \$110 + \$520 + \$330 - \$1{,}850 = \$510$ a month.

7. Medium Why can a strategy with lower cash flow still be the better choice for some investors?

Show answer

It may need less cash, less time or less skill, or carry much less risk. A smaller, steadier return that fits the owner's life can beat a larger, riskier one.

8. Hard In the lesson's BRRRR, what refinance loan would give a DSCR of exactly 1.25 at 7.25% for 30 years, if NOI is $14,380.08? (A 7.25% 30-year loan costs about $6.82 a month per $1,000.)

Show answer

Maximum debt service $\$14{,}380.08 \div 1.25 = \$11{,}504.06$ a year, or $958.67 a month. Loan $\$958.67 \div 6.82 \times \$1{,}000 \approx \$140{,}567$, about 50% of the $280,000 value — so about $69,000 more cash would stay in the deal.

9. Hard A family with two young children wants to invest but will not share their home with tenants. Which of the lesson's five strategies fit, and which do not?

Show answer

The room house hack does not fit their values and should be crossed out. The long-term rental at a lower price fits best; the flip and short-term rental lose money here, and the BRRRR cannot carry its loan.

10. Hard The city where the lesson's house sits forbids short-term rentals except in the owner's primary residence. How does that change the analysis?

Show answer

The short-term rental fails the legally permissible test for an investor and is crossed out. It could only be considered if the owner lived there, as a kind of house hack, under the city's permit rules.

11. **Challenge** In this example, the long-term rental earns $1,805.86 a year on $92,500. If the price were $190,000 instead of $210,000 (25% down), the loan would be $142,500 with P&I of about $948.06. Estimate the new cash flow and cash-on-cash if NOI stays $14,380.08 and closing stays $5,000.

    Show answer

    Debt service $\$948.06 \times 12 = \$11{,}376.72$; cash flow $\$14{,}380.08 - \$11{,}376.72 = \$3{,}003.36$. Cash needed $\$47{,}500 + \$5{,}000 + \$35{,}000 = \$87{,}500$; cash-on-cash $\$3{,}003.36 \div \$87{,}500 \approx 3.4\%$.

12. **Challenge** Write the opening two sentences of a decision memo recommending that an investor walk away from the lesson's house at its $210,000 asking price.

    Show answer

    A strong answer states the recommendation and the decisive numbers: for example, "I recommend we not buy 123 Main at $210,000: as a rental it earns only about $150 a month on $92,500, the BRRRR cannot cover its refinance (DSCR 0.84) and the flip loses about $12,400. We should offer no more than $190,000, where the rental's cash-on-cash rises to about 3.4%, and walk away if refused."

COMMON MISTAKES

- Changing the rent, ARV or expenses between strategies. Fix the property facts once and change only what the strategy changes.
- Choosing the strategy with the largest gross number. Compare NOI, cash flow, cash needed and risk.
- Skipping the legal test. A short-term rental or added unit that the zoning or HOA forbids is not an option.
- Ignoring the buyer. Cash, credit, time, skill, family life and stage of life decide which strategy fits.
- Assuming a BRRRR's cash-out is profit. Cash pulled out is borrowed; the rent must carry the larger loan.
- Forgetting that walking away is a strategy. Most listings fail every strategy at the asking price.

Make it a game · Five Strategies, One Buyer. Write five strategy cards (long-term rental, house hack, BRRRR, flip, short-term rental) and a stack of buyer cards — for example, "newlyweds with $20,000," "retired teacher with $150,000 who wants no debt," "contractor with $60,000 and free summers," "single 21-year-old," "family of six." Draw a buyer card. Each player has one minute to pick the strategy that fits, then defends it in thirty seconds using one number from the lesson. The family votes; the best defense earns a point. After five rounds, everyone names one strategy they would never recommend to one of the buyers, and why.

Scripture. "The thoughts of the diligent tend only to plenteousness; but of every one that is hasty only to want." (Proverbs 21:5, KJV)

Running one house through five strategies is diligent thinking: slow, careful and thorough before money is committed. The hasty buyer picks the exciting strategy first and finds the numbers later, and the proverb says where that leads. Diligence includes writing down why you chose — and why you walked away.

UNIT 7

Flips, Short-Term and Mid-Term Rentals

A run-down house on a quiet street can be bought, fixed and sold in six months; it can be furnished and rented to vacationers by the night; it can be leased to traveling nurses by the month; or it can be held for years as an ordinary rental. In this unit you will learn to run every one of those strategies with honest numbers. You will work through the **fix-and-flip** budget line by line — **after-repair value**, rehab and **contingency**, **holding costs**, interest and **points**, selling costs — and the **70% rule** that screens offers, and you will watch a profitable flip turn into a loss when it runs three months long. You will lay out a flip's **critical path**, plan an **exit strategy** and a backup, and learn why honest disclosure is part of the job.

Then you will turn to furnished rentals. You will measure a **short-term rental** with **ADR**, **occupancy** and **RevPAR**, model it in the Rental worksheet and discover how little of its higher gross survives the extra costs — and you will learn the permits, taxes and neighborly duties that come with it. You will see how a **mid-term rental** for nurses and relocating workers sits between nightly and yearly rentals. Finally, you will analyze one real house five ways and defend one choice in a written memo — often the choice to walk away.

PREREQUISITES

- Can build NOI, cash flow, cash-on-cash and DSCR for a rental in the Rental worksheet (Unit 3)
- Can estimate an after-repair value from sold comparables and a rent from rent comparables (Unit 2)
- Can build a line-item rehab budget and explain the BRRRR refinance and cash-left-in calculation (Unit 6)
- Has a deal binder with at least ten analyzed listings and a working calculator and spreadsheet

MASTERY CHECKLIST

- ☐ I can compute a flip's total cost, profit, cash in, return on cash and annualized return in the Fix & flip worksheet and by hand.
- ☐ I can apply the 70% rule, explain why the percentage varies and solve backward for the highest sensible offer.
- ☐ I can lay out a flip's critical path, find its monthly carrying cost and compare a price cut with waiting.
- ☐ I can explain a flipper's duty to disclose known defects and test whether a flip could be rented instead.
- ☐ I can compute nights booked, revenue and RevPAR from ADR and occupancy, and model a short-term rental in the Rental worksheet.
- ☐ I can find and explain the permits, HOA rules, lodging taxes and insurance that govern short-term rentals where I live.
- ☐ I can convert stays and gaps into a vacancy rate and analyze a furnished mid-term rental, including the landlord–tenant rules that apply.
- ☐ I can analyze one property five ways, compare the strategies in a decision matrix and defend a recommendation in a written memo.

OPTIONAL BOOKS AND RESOURCES FOR THIS UNIT

- **School Launch Deal Analyzer**: Free. The Fix & flip worksheet for Lessons 7.1–7.2, the Rental worksheet for short- and mid-term rentals in Lessons 7.3–7.4, and all four worksheets for the five-strategy project in Lesson 7.5. Print each filled-in worksheet for your deal binder. Ages 14 and up.
- ***The Book on Flipping Houses* by J Scott (BiggerPockets Publishing)**: A practitioner's step-by-step guide to finding, financing, renovating and selling flips, with detailed budgets and schedules. Read alongside Lessons 7.1 and 7.2; ignore any figures that are out of date and use your own local numbers. Ages 15 and up.
- ***Short-Term Rental, Long-Term Wealth* by Avery Carl (BiggerPockets Publishing)**: A guide to analyzing, furnishing and operating vacation rentals. Use it with Lesson 7.3, and check every market example against your own city's current rules before trusting it. Ages 15 and up.
- ***30-Day Stay* by Zeona McIntyre and Sarah Karakaian (BiggerPockets Publishing)**: A guide to furnished mid-term rentals for traveling professionals and other monthly tenants. Read with Lesson 7.4, and confirm lease and deposit rules with your state's official landlord–tenant sources. Ages 15 and up.
- **IRS Publication 527, Residential Rental Property**: Free, official. The IRS guide to rental income and expenses, including the special rules for a dwelling you also use personally and for renting a home for fewer than 15 days. Skim the vacation-home section with Lesson 7.3; Unit 9 returns to it. Education only, not tax advice. Ages 15 and up.

Not required. Every project in this unit works without them. School Launch has no ties to these authors, publishers or companies.

LESSONS IN THIS UNIT

7.1	**Fix-and-Flip Math: ARV, Holding Costs and Profit**	3 sessions of 50 minutes
7.2	**Running a Flip: Timeline, Risk and Exit**	3 sessions of 50 minutes
7.3	**Short-Term Rentals: Revenue, Occupancy and Rules**	3 sessions of 50 minutes
7.4	**Mid-Term Rentals and Furnished Housing**	3 sessions of 50 minutes
7.5	**One House, Five Strategies**	3 sessions of 50 minutes

Unit 7 test

Closed notes, basic calculator only. Twenty four-choice questions, 5 points each, 100 points total. Allow about two minutes per question — set a timer for 40 minutes. Show the arithmetic for every calculation question on scratch paper, and choose the one best answer. Aim for 80% or better, and rework every miss in your notebook. Figures marked “in this example” are examples; real prices, rents, rates, fees and rules vary by place and year.

1. **5 pts**

   In this example, a house has an ARV of $260,000 and needs $45,000 of repairs. What is the 70% rule maximum offer?

   A. $137,000

   B. $182,000

   C. $140,000

   D. $92,000

2. **5 pts**

   In this example, a flipper borrows $220,000 at 12% for 6 months. Using the Deal Analyzer’s convention, how much interest is owed?

   A. $26,400

   B. $13,200

   C. $2,200

   D. $15,840

3. **5 pts**

   Which cost is NOT part of the cash a flipper must bring in before the sale?

   A. The rehab not covered by the loan

   B. Lender points

   C. Selling costs

   D. Holding costs

4. 5 pts

In this example, a flip earns a 15% return on cash in 4 months. What is the annualized return?

A. 15%

B. 60%

C. 30%

D. 45%

5. 5 pts

A person who buys houses in order to renovate and resell them is generally treated for tax purposes as holding:

A. Investment property eligible for a 1031 exchange

B. Dealer property, with profits taxed as ordinary income

C. A primary residence eligible for the Section 121 exclusion

D. Personal-use property with no tax on gains

6. 5 pts

On a flip, which task is MOST likely to sit on the critical path?

A. The rough-in inspection before drywall

B. Ordering cabinets during the permit wait

C. Painting the mailbox

D. Choosing the listing photographer

7. 5 pts

In this example, a finished flip carries a $150,000 loan at 10% and $500 a month of holding costs. What is its monthly carrying cost?

A. $1,250

B. $15,500

C. $1,750

D. $2,250

8. 5 pts

During a rehab, a flipper finds a cracked foundation footing, repairs it cosmetically and covers it with new drywall. When she sells, she should:

A. Say nothing, because the buyer can order an inspection

B. Disclose it only if the buyer asks directly

C. Lower the price but not explain why

D. Disclose the known defect as her state's disclosure law requires

9. 5 pts

In this example, a flip that will not sell could be refinanced and rented. NOI would be $13,800 and the new loan's annual debt service $16,500. What is the DSCR, and does the rental exit work?

A. 0.84; no

B. 1.20; yes

C. 1.84; yes

D. 0.16; no

10. 5 pts

In this example, a cabin's ADR is $200 and its occupancy is 55%. What is its RevPAR?

A. $90

B. $110

C. $200

D. $364

11. 5 pts

When modeling a short-term rental in the Rental worksheet, why is vacancy set near 0%?

A. Short-term rentals are never empty

B. Lenders require it

C. The revenue estimate already reflects occupancy, so vacancy would count empty nights twice

D. Vacancy is an operating expense

12. 5 pts

A short-term host collects $4,000 of lodging taxes from guests during a year. In the deal analysis, that money is:

A. Other income

B. Part of the ADR

C. A reduction of operating expenses

D. Not income; it is collected for and owed to the government

13. 5 pts

A city allows short-term rentals, but the subdivision's recorded CC&Rs forbid rentals of fewer than 30 days. An investor may:

A. Not operate a nightly rental there, because the CC&Rs still apply

B. Operate one, because the city's permit overrides the HOA

C. Operate one if guests sign a 30-day lease and leave after three nights

D. Operate one if no neighbor complains

14. 5 pts

In this example, a furnished rental's stays average 12 weeks with 3-week gaps between them. What vacancy rate should be used?

A. 3%

B. 25%

C. 20%

D. 12%

15. 5 pts

A landlord of a 1950 house signs a 90-day furnished lease that may be extended. Under the federal lead-based paint rule, she:

A. Is exempt, because the lease is under 100 days

B. Must give the EPA pamphlet and disclosure, because the lease can be extended

C. Must hire a lead inspector before the lease

D. Is exempt, because the home is furnished

16. 5 pts

A mid-term tenant on a 60-day lease refuses to leave when it ends. The landlord should:

A. Change the locks while the tenant is at work

B. Turn off the utilities until the tenant leaves

C. Report the tenant to the booking website and wait

D. Give the notice state law requires and, if needed, use the court eviction process

17. 5 pts

Which strategy commonly lets a buyer start with the least cash because it can use an owner-occupant loan?

A. House hacking

B. A cash BRRRR

C. A short-term rental bought as a second home investment

D. A hard-money flip

18. 5 pts

In highest-and-best-use analysis, which test is applied FIRST?

A. Financially feasible

B. Legally permissible

C. Maximally productive

D. Physically possible

19. 5 pts

In this example, a house would earn $21,000 a year as a long-term rental and $38,000 a year as a short-term rental. Before choosing, an investor should compare:

A. The two gross figures

B. The two cap rates on gross income

C. NOI, cash flow and cash needed after the short-term rental's extra expenses

D. Only the nightly rate against local hotels

20. 5 pts

In this example, a flip projects an $8,000 profit, and each extra month of carrying costs $2,500. If it runs 4 months long, what is the result?

A. $8,000 profit

B. $2,000 profit

C. $10,000 loss

D. $2,000 loss

ANSWER KEY

1. A. $\$260{,}000 \times 0.70 - \$45{,}000 = \$137{,}000$. B forgets to subtract the repairs; D subtracts them twice.
2. B. $\$220{,}000 \times 0.12 \div 12 \times 6 = \$13{,}200$. A is a full year's interest; C is one month's.
3. C. Selling costs are paid out of the sale proceeds at closing, so the worksheet subtracts them from total cost when computing cash in. The others are paid before the house sells.
4. D. $15\% \times 12 \div 4 = 45\%$. It assumes three such flips back to back, which is why annualized returns can flatter a single flip.
5. B. Property held primarily for sale is dealer inventory, and its profit is generally ordinary income. Dealer property cannot be exchanged under Section 1031, which is the tempting wrong answer A.
6. A. Drywall cannot start until the rough-in inspection passes, so a delay there delays everything after it. B is the classic way to keep a long-lead item off the critical path.
7. C. Interest $\$150{,}000 \times 0.10 \div 12 = \$1{,}250$ plus holding $\$500$ equals $\$1{,}750$. A forgets the holding costs.
8. D. A known material defect hidden from view is a latent defect, and sellers generally must disclose what they know. Concealing it invites lawsuits and is dishonest; A is the tempting but wrong answer.
9. A. $\$13{,}800 \div \$16{,}500 \approx 0.84$. Below 1.0 the rent does not even cover the loan, and lenders commonly want 1.2–1.25.
10. B. $\$200 \times 0.55 = \$110$. C is the ADR itself, which ignores the empty nights.
11. C. Revenue = ADR × nights booked already includes the unbooked nights. A is false — empty nights are normal.
12. D. Lodging taxes pass through the host (or the platform) to the state or city. Counting them as income would overstate revenue.
13. A. Private covenants can restrict uses the city allows. C describes evading the rule, which this course rejects and which can bring fines and lawsuits.
14. C. Occupancy $12 \div 15 = 80\%$, so vacancy is 20%. B divides 3 by 12 instead of by the full 15-week cycle.
15. B. Only leases of 100 days or less with no renewal or extension are exempt. The rule requires disclosure of known lead-based paint, not an inspection, so C is wrong.

16. D. A 30-day-plus occupant is generally a tenant under landlord–tenant law, and lockouts and utility shutoffs are illegal self-help in nearly every state.
17. A. Living in the property can qualify a buyer for owner-occupant financing with a small down payment. The others commonly require investor down payments or large cash for purchase and rehab.
18. B. A use the zoning, permits or covenants forbid is ruled out before cost or return is even considered.
19. C. Short-term rentals add utilities, furnishing, cleaning coordination, platform fees, higher insurance and more wear. In the lesson's example the gross nearly doubled while NOI rose only $18.62.
20. D. $\$8{,}000 - 4 \times \$2{,}500 = -\$2{,}000$. B subtracts only two months, and C subtracts the profit again.

PORTFOLIO PIECE: DEAL BINDER — FLIPS, SHORT-TERM AND MID-TERM RENTALS

Add this unit's analyses to your deal binder: the flip budget with its three stress tests and highest sensible offer (7.1); the critical-path chart, carrying cost and rental-exit worksheet for the same flip (7.2); the side-by-side long-term and short-term analysis with the local permit and lodging-tax findings (7.3); the furnished-rental market map, mid-term worksheets and the three state landlord–tenant rules you found (7.4); and the five worksheets, comparison table, decision matrix and one-page decision memo for a single property (7.5).

Every worksheet must be printed and dated, every verdict must state buy, negotiate to a stated price or walk away, and every legal or tax rule must cite the official source you used and the date you checked it.

LOOK FOR	WHAT IT MEANS
Flip budget and stress tests	Every cost line is present, the ARV comes from sold comparables, the three stress tests are run and the highest sensible offer is solved backward correctly.
Timeline and exit plan	The critical path is drawn with dependencies, the months entered match it, the carrying cost is computed and the rental exit is tested with a DSCR.
Short-term rental analysis	Revenue is built season by season from comparables, expenses are converted correctly, break-even occupancy is found and the permit, HOA and tax findings are cited.
Mid-term rental analysis	Vacancy is derived from stays and gaps, furnished comparables are used, furnishing is in cash invested and three state rules are cited from official sources.
Five-strategy decision memo	Property facts are identical across worksheets, illegal options are ruled out, the decision matrix is weighted to a stated buyer and the memo gives a price, risks and a backup exit.
Honesty and judgment	Verdicts follow the numbers, walking away is chosen where the numbers fail, and no plan depends on breaking a rule or hiding a defect.

UNIT 8

Landlording and Property Management

Buying a rental is a single day; being a landlord is every day after it. A rented house is someone's home, and the landlord's work is to keep that home safe, fair and well run while the numbers stay honest. In this unit you will learn landlording as service. You will study the **Fair Housing Act** and its seven federal **protected classes** as settled law, write **screening criteria** before you advertise and apply them the same way to every applicant, and learn the **adverse action notice** a screening report requires. You will read and annotate a **lease**, follow your state's rules for the **security deposit**, and carry out a careful move-in.

Then you will plan the work that keeps a home livable: the **implied warranty of habitability**, a preventive calendar, the true cost of a **turnover** and a **CapEx reserve** built from a component table. You will design a rent collection system that is kind and firm, practice the hard conversation about late rent and learn the lawful **eviction** process — notice, court, judgment and sheriff — as a rare last resort, never self-help. Finally, you will weigh managing your own property against hiring a **property manager**, with every fee counted and your own time valued honestly.

PREREQUISITES

- Can build a full Rental worksheet analysis, including vacancy, repairs, CapEx and management percentages (Unit 3)
- Can explain why landlord–tenant law differs by state and find your state's official landlord–tenant sources (Lesson 2.5)
- Can estimate market rent from rent comparables and describe a rental listing accurately (Lesson 2.3)
- Has a deal binder with analyzed rentals to which this unit's policies and documents can be attached

MASTERY CHECKLIST

- ☐ I can name the seven federal protected classes, find the added classes in my state and city and write a rental ad that describes the property, not the people wanted.
- ☐ I can write screening criteria, apply them identically to several applicants in the order received and document each decision, including an FCRA adverse action notice.
- ☐ I can respond lawfully to a reasonable accommodation request such as an assistance animal.
- ☐ I can annotate a lease against my state's statute, compute prorated rent and settle a security deposit with an itemized statement that separates damage from normal wear and tear.
- ☐ I can build a preventive maintenance calendar, a component-based CapEx reserve and a turnover cost estimate, and set the Rental worksheet's repairs and CapEx percentages from them.
- ☐ I can tell a repair from a capital improvement using the betterment, restoration and adaptation tests.
- ☐ I can describe the lawful eviction process in order, explain why self-help and retaliation are illegal, and compute the cost of nonpayment

and its effect on vacancy and reserves.

- ☐ I can compute a property manager's full annual cost, value my own management time and read a management agreement for red flags.

OPTIONAL BOOKS AND RESOURCES FOR THIS UNIT

- **School Launch Deal Analyzer**: Free. The Rental worksheet's vacancy, repairs, CapEx and management inputs carry every lesson in this unit; rerun your deal-binder properties with the honest numbers you build here. Ages 14 and up.
- **HUD: Fair Housing Rights and Obligations**: Free, official. The U.S. Department of Housing and Urban Development's explanation of what the Fair Housing Act requires of housing providers. Read with Lesson 8.1, then find your own state civil rights agency's housing page. Ages 14 and up.
- **EPA: Real Estate Disclosures about Potential Lead Hazards**: Free, official. What landlords of pre-1978 housing must disclose before a lease, with the pamphlet and sample forms. Use it in the Lesson 8.2 project. Ages 14 and up.
- **CFPB: List of consumer reporting companies**: Free, official. The Consumer Financial Protection Bureau's list of consumer reporting companies, including tenant screening companies, with how consumers can request their reports. Use it with Lesson 8.1 to understand what an adverse action notice points an applicant to. Ages 15 and up.
- ***The Book on Managing Rental Properties* by Brandon and Heather Turner (BiggerPockets Publishing)**: A practical guide to screening, leases, maintenance, rent collection and systems for small landlords. Read alongside the whole unit, and check every legal point against your own state's official sources. Ages 15 and up.

Not required. Every project in this unit works without them. School Launch has no ties to these authors, publishers or companies.

LESSONS IN THIS UNIT

8.1 Fair Housing and Tenant Screening

3 sessions of 50 minutes

8.2	**Leases, Deposits and Move-In**	3 sessions of 50 minutes
8.3	**Maintenance, Turnovers and Capital Projects**	3 sessions of 50 minutes
8.4	**Rent Collection, Hard Conversations and Eviction as a Last Resort**	3 sessions of 50 minutes
8.5	**Self-Manage or Hire a Manager**	3 sessions of 50 minutes

Unit 8 test

Closed notes, basic calculator only. Twenty four-choice questions, 5 points each, 100 points total. Allow about two minutes per question — set a timer for 40 minutes. Show the arithmetic for every calculation question on scratch paper, and choose the one best answer. Aim for 80% or better, and rework every miss in your notebook. Figures marked “in this example” are examples; real rents, fees, deadlines and rules vary by state, city and year.

1. **5 pts**

   Which of the following is NOT one of the seven federal protected classes under the Fair Housing Act?

   A. Familial status

   B. Disability

   C. Source of income

   D. National origin

2. **5 pts**

   Which rental ad wording is lawful?

   A. “Perfect for a young professional couple”

   B. “Two-bedroom apartment, $1,400, no smoking, pets considered”

   C. “Ideal for singles; no children”

   D. “Christian household preferred”

3. 5 pts

In this example, rent is $1,500 and the written criterion is gross monthly income of at least 3 times the rent. An applicant earns $4,350 a month. Does the applicant meet the criterion?

A. Yes, with $150 to spare

B. Yes, because the ratio is 3.0

C. No, because the minimum is $5,000

D. No, because the minimum is $4,500

4. 5 pts

Based partly on a tenant screening report, a landlord requires an applicant to provide a co-signer that other applicants were not required to provide. The landlord must:

A. Give the applicant an FCRA adverse action notice

B. Do nothing, because the applicant was not denied

C. Refund the application fee

D. Report the applicant to HUD

5. 5 pts

A tenant with a disability is approved to keep an assistance animal in a no-pets building as a reasonable accommodation. The landlord may:

A. Charge the usual $300 pet deposit

B. Charge monthly pet rent

C. Charge the tenant for actual damage the animal causes, but no pet fee

D. Require the tenant to move to a ground-floor unit

6. 5 pts

In this example, a tenant's deposit is $1,600. At move-out there is $300 of unpaid rent, $250 of damage beyond normal wear and $400 of ordinary paint fading. How much must be refunded?

A. $650

B. $1,050

C. $1,300

D. $1,600

7. 5 pts

In this example, a tenant moves in on the 21st of a 30-day month at $1,500 rent. Using the days-in-month method, what is the prorated rent?

A. $450

B. $1,050

C. $500

D. $550

8. 5 pts

A landlord is leasing a house built in 1975 on a 12-month lease. Under federal law the landlord must:

A. Test the house for lead before leasing

B. Do nothing, because only pre-1960 homes are covered

C. Remove all lead paint before leasing

D. Give the EPA pamphlet, disclose any known lead-based paint and keep the signed disclosure three years

9. 5 pts

In the Rental worksheet, a tenant's $1,800 security deposit should be treated as:

A. Neither income nor cash invested, because it belongs to the tenant

B. Other income in the first year

C. Part of the down payment

D. A reduction of operating expenses

10. 5 pts

Javins v. First National Realty Corp. (1970) is known for holding that:

A. Landlords may evict without a court order

B. A warranty of habitability is implied in urban residential leases

C. Security deposits must earn interest

D. Tenants may never withhold rent

11. 5 pts

In this example, a roof costs $10,800 to replace and lasts 20 years. What monthly CapEx reserve does it need?

A. $540

B. $90

C. $45

D. $27

12. 5 pts

Which work is a capital improvement rather than a repair?

A. Patching a small roof leak

B. Replacing a broken window latch

C. Fixing a dripping faucet

D. Replacing the entire roof

13. 5 pts

In this example, each turnover costs $3,600 and tenants stay 3 years on average. What is the annual turnover cost?

A. $1,200

B. $3,600

C. $10,800

D. $300

14. 5 pts

A tenant is two months behind on rent. Which action is lawful?

A. Changing the locks while the tenant is away

B. Shutting off the water until the rent is paid

C. Removing the tenant’s belongings to the curb

D. Serving the notice state law requires and, if necessary, filing an eviction in court

15. 5 pts

What is the correct order of a lawful eviction?

A. Notice, filing, service, hearing, judgment, writ enforced by a sheriff or marshal

B. Filing, notice, judgment, hearing, writ, service

C. Lockout, notice, hearing, judgment

D. Hearing, notice, filing, writ, judgment

16. 5 pts

A tenant reports code violations to the city, and the landlord responds by filing to evict. This is most likely:

A. A cure-or-quit notice

B. Retaliation, which is illegal in most states

C. A lawful no-cause termination in every state

D. Cash for keys

17. 5 pts

In this example, rent is $2,000 a month with 5% vacancy, and a manager charges 8% of collected rent. What is the annual management fee?

A. $1,920

B. $1,600

C. $1,824

D. $2,280

18. 5 pts

Which management agreement clause is the clearest red flag?

A. “Either party may cancel with 30 days’ notice.”

B. “Deposits are held in Manager’s trust account.”

C. “Owner receives a monthly statement.”

D. “Manager may make any repair it chooses without owner approval.”

19. 5 pts

In many states, a person who manages rental property for other owners for pay must:

A. Hold a real estate license or a property-management license, as state law requires

B. Hold a general contractor’s license

C. Be a certified public accountant

D. Register with HUD

20. 5 pts

A reliable tenant of four years loses her job and is one month behind, but has a new job starting soon. The best first response is to:

A. Serve an eviction notice the same day without speaking to her

B. Talk with her, consider a written payment plan offered under the same policy as for any tenant, and point her to local help

C. Forgive the rent informally and say nothing more

D. Raise her rent to cover the risk

ANSWER KEY

1. C. Source of income is protected by some states and cities, not by the federal act. The federal classes are race, color, religion, national origin, sex, familial status and disability.
2. B. It describes the property, rent and policies. A, C and D state preferences about familial status or religion, which the advertising rule forbids.
3. D. $\$1{,}500 \times 3 = \$4{,}500$, and $\$4{,}350$ is $\$150$ short. The same rule must be applied to every applicant.
4. A. Requiring a co-signer because of a consumer report is adverse action under the FCRA, even though the application was not denied — the tempting wrong answer B.
5. C. Pet fees and pet rent may not be charged for an approved assistance animal, but the tenant remains responsible for actual damage. D would impose a different term because of the disability.
6. B. $\$1{,}600 - \$300 - \$250 = \$1{,}050$. Ordinary fading is normal wear and tear and may not be deducted; A wrongly deducts it.
7. C. The 21st through the 30th is $30 - 21 + 1 = 10$ days, and $10 \times (\$1{,}500 \div 30) = 10 \times \$50 = \$500$. D counts 11 days; B is the rent for the days not occupied.
8. D. Housing built before 1978 is covered. The rule requires disclosure of what is known and the pamphlet — not testing or removal, the tempting answers A and C.
9. A. A security deposit is a liability held for the tenant and must be returned, less lawful deductions.
10. B. The court held that leases of urban dwellings carry an implied warranty of habitability measured by the housing code, a rule nearly every state now follows.
11. C. $\$10{,}800 \div 20 = \$540$ a year; $\$540 \div 12 = \$45$ a month. A is the annual figure.
12. D. Replacing a major component restores the property and is generally depreciated. A, B and C keep the property in ordinary working condition.
13. A. $\$3{,}600 \div 3 = \$1{,}200$ a year. Longer tenancies lower this number, which is why keeping good tenants pays.
14. D. A, B and C are self-help eviction, illegal in nearly every state and a source of damages against the landlord.

15. A. The landlord gives proper notice first, then files, serves, attends the hearing, obtains a judgment and, if needed, has a sheriff or marshal enforce the writ.
16. B. Punishing a tenant for complaining to authorities is retaliation. C is wrong because many states presume retaliation when an eviction follows a complaint.
17. C. Collected rent $\$24{,}000 \times 0.95 = \$22{,}800$; fee $\$22{,}800 \times 0.08 = \$1{,}824$. A charges the fee on scheduled rent, not collected rent.
18. D. With no repair authorization limit, the manager can spend the owner's money without restraint. A, B and C are sound terms.
19. A. Managing for others is a licensed real estate activity in many states, with trust-account rules; a few states exempt it, so check your state. An owner managing his own property generally needs no license.
20. B. Kindness and firmness together: a conversation, a written plan and resources usually cost far less than an eviction. C leaves no record and is not offered consistently to others.

PORTFOLIO PIECE: DEAL BINDER — LANDLORDING AND PROPERTY MANAGEMENT

Add this unit's landlord's handbook to your deal binder: the list of protected classes for your state and city, a lawful ad, written screening criteria, five sample screening decisions and a sample adverse action notice (8.1); an annotated lease, your state's deposit and disclosure rules, a move-in condition report and a proration (8.2); a twelve-month preventive calendar, a component CapEx table, a turnover estimate and the reworked Rental worksheet (8.3); a rent collection policy, your state's eviction steps from official sources, a conversation script, a payment plan and an eviction cost sheet (8.4); and a manager comparison, a marked-up management agreement and a hire-or-self-manage decision (8.5).

Every state rule must cite the official source and the date you checked it. Together these documents form the operating manual you would actually use on the day you become a landlord.

LOOK FOR	WHAT IT MEANS
Fair housing and screening	The ad describes only the property and terms, the criteria are written before advertising and applied identically in order, every decision is documented and the adverse action notice is complete.
Lease, deposit and move-in	Every lease clause is marked with a cited state source, the deposit rules and disclosures are correct for the state and the condition report and proration are accurate.
Maintenance and CapEx	The preventive calendar fits the climate, the CapEx table converts correctly to a monthly reserve and percentage, and the Rental worksheet is rerun with evidence-based inputs.
Rent collection and eviction	The policy is consistent and lawful, the eviction steps match official state sources, no self-help appears anywhere and the cost sheet's arithmetic is correct.
Management decision	All manager fees are totaled for a year, self-management time is valued honestly, red flags are identified and the decision follows from the numbers and the owner's situation.
Service and honesty	Throughout, tenants are treated as neighbors to be served fairly, promises in writing match practice, and every legal statement is sourced rather than guessed.

8.1 Fair Housing and Tenant Screening

OBJECTIVES

- Name the seven federal protected classes under the Fair Housing Act and explain how to find the additional classes your state and city protect.
- Identify discriminatory practices — refusing to rent, different terms, steering, discriminatory advertising and refusing reasonable accommodations or modifications — and rewrite a rental ad that breaks the advertising rule.
- Write screening criteria for income, rental history, credit and other factors, and apply them identically to every applicant in the order applications are completed.
- Explain a landlord's duties under the Fair Credit Reporting Act when using tenant screening reports, including the adverse action notice.
- Document a screening decision so that it can be explained to an applicant, an agency or a court.

> **Warm-up.** You have one apartment and three people who want it. Before you meet any of them, write on paper the rules you will use to choose — and nothing else. Then underline any rule that would be hard to explain to someone you turned down. Keep the list; by the end of the lesson you will rewrite it.

WATCH

10. Housing Discrimination (Conversations about Landlord Tenant Law in Alaska)

uaajusticecenter · 4:36

https://www.youtube.com/watch?v=SCsHPLX5pQg

> **WHEN TO WATCH**
> Watch after the third core idea. It covers federal, Alaska and Anchorage law; list which protections are federal and which are state or local, then find your own state's list.

BACKUP VIDEO

The Definitive Guide To Tenant Screening | Daily Podcast

BiggerPockets · 7:48

https://www.youtube.com/watch?v=Sy3QO-o4i4Y

Listen during the project (it is audio only). Write down each screening step the host recommends, and check each one against your written criteria and the fair housing rules in this lesson.

KEY TERMS

Fair Housing Act

The federal law, Title VIII of the Civil Rights Act of 1968, that prohibits discrimination in the sale, rental and financing of dwellings because of a protected characteristic.

familial status

The presence of children under 18 living with a parent or legal custodian, a pregnant person or someone securing custody of a child.

protected class

A characteristic on which housing discrimination is forbidden: federally, race, color, religion, national origin, sex, familial status and disability, plus any added by state or local law.

steering

Guiding applicants toward or away from certain buildings, units or neighborhoods because of a protected characteristic.

discriminatory advertising

Any notice, statement or ad that indicates a preference, limitation or discrimination based on a protected class; it is prohibited even for owners otherwise exempt.

reasonable accommodation

A change in a rule, policy, practice or service that may be necessary for a person with a disability to have equal opportunity to use and enjoy a dwelling.

reasonable modification

A physical change to a dwelling or common area that may be necessary for a person with a disability, generally made at the tenant's expense in private housing.

assistance animal

An animal that does work, performs tasks or provides support for a person with a disability; allowing one in a no-pets building is a common reasonable accommodation.

screening criteria

The written standards — such as income, rental history and credit — that every applicant must meet, applied the same way to all.

consumer report

Under the Fair Credit Reporting Act, a credit report or tenant background report from a consumer reporting agency used in deciding whether to rent.

adverse action notice

The notice a landlord must give an applicant when a decision such as a denial, a co-signer requirement or a higher deposit is based even partly on a consumer report.

disparate treatment

Treating an applicant or tenant differently because of a protected characteristic, such as asking only some applicants for extra documents.

CORE IDEAS

The story. On April 11, 1968, President Lyndon Johnson signed the Civil Rights Act of 1968, whose Title VIII became known as the Fair Housing Act. Congress had debated a national fair housing law for two years without passing it; it moved quickly in the days after the assassination of Dr. Martin Luther King Jr. on April 4, and the bill was signed one week later. The law made it illegal to refuse to sell or rent a dwelling, to set different terms or to advertise a preference because of race, color, religion or national origin. Congress added **sex** in 1974, and the Fair Housing Amendments Act

of 1988 added **familial status** and **disability**, gave HUD stronger enforcement tools and took effect in March 1989. More than half a century later, these seven protected classes are settled federal law that every landlord, from the owner of one rented house to a large manager, must follow.

How they figured it out. A law forbidding discrimination raised a practical question for landlords: how do you choose among applicants in a way that is plainly fair and can be shown to be fair? The answer that grew up in property management is **written screening criteria**, set before any applicant appears, applied the same way to every applicant and documented. A second law shaped the tools. The Fair Credit Reporting Act of 1970 governs the credit and background reports landlords buy: a landlord must have a permissible purpose (an application to rent), must use the report only for housing and must give an **adverse action notice** when a report contributes to a denial or to tougher terms. Landlords also learned that most fair housing complaints arise not from open hostility but from inconsistency — a question asked of one applicant and not another, a rule waived for a friend, an ad that says who is wanted instead of what is offered.

The big idea. A landlord chooses tenants by the property's written standards, never by who they are. Under the Fair Housing Act it is illegal, because of race, color, religion, national origin, sex, familial status or disability, to refuse to rent or negotiate, to set different terms, deposits or rules, to falsely say a unit is unavailable, to **steer** applicants toward or away from units or neighborhoods, to publish an ad indicating a preference, to refuse a reasonable accommodation or modification for a person with a disability, or to threaten or retaliate against anyone exercising these rights. Many states and cities protect more classes — for example source of income (including housing vouchers), age, marital status, military status or others — so check your state's civil rights agency and your city's code. A few narrow exemptions exist in federal law, such as for some owner-occupied buildings of two to four units, but the advertising ban applies to everyone, state law may not exempt you, and this course teaches you to follow fair housing in every case.

Advertising is where many small landlords stumble. Describe the property and the terms, not the people you hope to attract. "Quiet three-bedroom house near the park, $1,600 a month, no smoking, pets considered, available June 1" is lawful. "Perfect for a young professional couple," "no kids," "Christian household preferred," "great for singles" and "English speakers only" are not, because each expresses a

preference about a protected class. **Familial status** protects families with children under 18, pregnant tenants and people securing custody: you may not refuse them, charge them more, limit them to certain units or make rules that single out children. Occupancy limits must be reasonable and are commonly set by local building and housing codes — use the code, not a guess. Ask every applicant the same questions in the same order, show every applicant the same available units and keep the same application fee for all (some states cap or regulate fees).

Write your **screening criteria** before you advertise and give them to every applicant. In this example: verifiable gross income of at least 3 times the rent (many landlords use 2.5–3 times; it is an example); positive references from current and prior landlords; no unpaid judgment owed to a prior landlord within a stated period; a credit check focused on housing-related debts; valid identification for every adult; and a policy on criminal history that follows your state and city law — several states and cities limit what landlords may ask or consider, and federal guidance on criminal records has changed more than once, so check current HUD and local sources. Process completed applications in the order received, and offer the unit to the first applicant who meets every criterion. Write down why each applicant was approved or denied, keep the file for the period your state requires (commonly several years) and destroy screening reports securely when done, as the FCRA disposal rule requires.

Disability law asks landlords to bend rules, not standards. A **reasonable accommodation** is a change in a rule or policy that a person with a disability needs — for example, allowing an **assistance animal** in a no-pets building without charging a pet fee, or a reserved parking space near the door. A **reasonable modification** is a physical change, such as grab bars or a ramp, generally paid for by the tenant in private housing. When the disability or need is not obvious, a landlord commonly may ask for reliable information that the person has a disability and needs the accommodation, but generally should not demand a diagnosis or medical records — federal guidance on these requests has changed over time, so check current HUD and state sources; a request can be refused if it would impose an undue burden or a direct threat. The **FCRA** adds paperwork duties: when a consumer report contributes to denying an applicant, requiring a co-signer, a larger deposit or a higher rent, the notice must name the reporting company with its address and phone number, state

that the company did not make the decision and explain the applicant's right to a free report within 60 days and to dispute errors.

Run the numbers. Screening shows up in the Rental worksheet as the vacancy percentage, which in this course includes **credit loss** — rent never collected. Careful, consistent screening keeps credit loss low; sloppy screening raises it, and an eviction (Lesson 8.4) can cost months of rent. But no number ever justifies discrimination, and a fair housing complaint can cost far more than any bad tenant: legal fees, damages and penalties are real expenses no spreadsheet line covers. Use the income criterion as arithmetic, not judgment: in this example, for $1,600 rent at 3 times, an applicant needs $\$1{,}600 \times 3 = \$4{,}800$ of verifiable gross monthly income, counted the same way for everyone. The classic mistakes: deciding first and finding a reason later; waiving a criterion for a friendly applicant but not for others; asking families how many children they plan to have; advertising who you want instead of what you offer; and denying an applicant on a screening report without the adverse action notice.

PICTURE STUDY



Woman Weighing Gold, Pieter de Hooch, c. 1664 · Oil on canvas · Gemäldegalerie, Berlin; public domain

Image: Wikimedia Commons, public domain

Pieter de Hooch was a Dutch painter of quiet household scenes — courtyards, kitchens and rooms full of light — in Delft and Amsterdam in the 1650s and 1660s. Here a woman weighs gold coins on a small hand scale, checking each one against a true standard. In a time of many currencies, clipped and worn coins were common, and an honest balance was the only fair way to tell what a coin was worth. The picture opens this lesson because tenant screening is a kind of weighing: every applicant must be measured on the same scale, by the same written standard.

Look closely

- Find the tiny balance she holds up to the light. Its two pans give the same answer for any coin placed on them — the picture of a criterion applied to everyone.
- Notice the coins on the table waiting their turn. She weighs them one at a time, in order, as a landlord processes applications in the order they are completed.
- Look at the window lighting the scale. Good screening is done in the open, in writing, where it can be checked.

- See how carefully she bends to her work. Fairness takes attention; a careless glance is how mistakes and favoritism creep in.

Talk about it

1. What would it look like for a landlord to use a different set of weights for different applicants?
2. Why does writing the criteria down before advertising protect both the applicants and the landlord?
3. Proverbs 20:10 calls “divers weights, and divers measures” an abomination to the Lord. How does fair, consistent screening honor God and love the neighbor who applies?

PROJECT

Written Screening Criteria and a Lawful Ad

You will write the screening criteria and the rental ad for a pretend vacancy, test them against fair housing rules and practice applying them to sample applicants. You will contact no real applicant or landlord.

You will need

- HUD's fair housing rights and obligations pages, and your state civil rights agency's housing page
- A real rental listing from your area to use as the pretend vacancy
- A word processor or notebook, and the Deal Analyzer's Rental worksheet for the same property

Steps

1. From your state civil rights agency and your city's code, list every protected class that applies where the property is, with the source and date.
2. Rewrite the real listing's ad so it describes only the property, rent, deposit, terms and policies. Mark any phrase you removed and why.
3. Write one page of screening criteria: income multiple, how income is verified and counted, rental history, credit, identification, criminal-history policy as your state and city allow, occupancy standard from your local code, and the order of processing.
4. Write a short reasonable-accommodation statement telling applicants how to request one.
5. Invent five sample applicants with different incomes, histories and household types. Apply your criteria to each in writing, in the order their applications are completed, and record each decision and reason.
6. Draft a sample adverse action notice for an applicant denied partly on a screening report, with every item the FCRA requires.
7. Print the criteria, ad, decisions and notice, and file them in your deal binder with the property's Rental worksheet.

INVESTOR'S NOTEBOOK

1. Make flashcards for every key term, and one card listing the seven federal protected classes with the year each was added (1968, 1974, 1988).
2. Draw a two-column table: "Lawful ad words" (describing the property, terms and policies) and "Unlawful ad words" (describing the people wanted). Fill each with five examples.
3. Write a trap list titled "Fair housing," including "Criteria first, applicants second," "Same questions for everyone" and "Report used? Send the notice."

KEY FORMULAS

$$\text{Minimum gross monthly income} = \text{monthly rent} \times \text{income multiple (example: 3)}$$

$$\text{Income-to-rent ratio} = \frac{\text{verified gross monthly income}}{\text{monthly rent}}$$

From history. Two months after the Fair Housing Act became law, the Supreme Court decided *Jones v. Alfred H. Mayer Co.* on June 17, 1968. It held that a Reconstruction-era statute, the Civil Rights Act of 1866, bars all racial discrimination — private as well as public — in the sale or rental of property. Because the 1866 law has none of the Fair Housing Act's small exemptions, even an owner exempt from the 1968 Act may not refuse to rent because of race.

Example 1. In this example, rent is $1,600 and the written criterion is verifiable gross monthly income of at least 3 times the rent, counting all adults who will sign the lease. Applicant A earns $5,200 a month. Applicants B are two adult roommates earning $2,500 and $2,600. Applicant C earns $4,200. Who meets the income criterion?

Show solution

1. Minimum income: $\$1{,}600 \times 3 = \$4{,}800$.
2. A: $\$5{,}200 \div \$1{,}600 = 3.25$ — meets it.
3. B: $\$2{,}500 + \$2{,}600 = \$5{,}100$; $\$5{,}100 \div \$1{,}600 = 3.19$ — meets it, because the written rule counts all signers.
4. C: $\$4{,}200 \div \$1{,}600 = 2.63$ — does not meet it, unless the written policy offers every applicant the same alternative (for example, a qualified co-signer).

Answer: A and B meet the income criterion; C does not under these written rules. The same arithmetic is applied to every applicant.

Example 2. Applications arrive in this order on the same day: B at 9:00 a.m. (complete), A at 11:00 a.m. (complete), and a third applicant at 10:00 a.m. who leaves the employer section blank. B and A both meet every written criterion. Who is offered the unit, and how is it documented?

Show solution

1. The written policy says applications are processed in the order they are completed.
2. The 10:00 application is incomplete, so it is not yet in line; the applicant is told in writing what is missing, as any applicant would be.
3. B's complete application came first and meets every criterion, so B is offered the unit.
4. The file notes, for each applicant, the time received, each criterion checked and the result; A is told the unit is rented and offered the next available unit on the same terms.

Answer: B is offered the unit as the first complete, qualifying application. The written record shows the same rule was applied to all three.

Example 3. A prospective tenant in a no-pets building tells the landlord she has a disability and asks to keep an assistance animal. Her disability is not obvious. Walk through a lawful response.

Show solution

1. Recognize the request as a reasonable accommodation request under the Fair Housing Act; it can be made orally or in writing.
2. Because the disability and need are not obvious, the landlord may ask for reliable information that she has a disability and needs the animal — generally not for a diagnosis or medical records — following current HUD and state guidance.
3. If the information is provided, approve the accommodation without a pet fee or pet deposit; she remains responsible for any actual damage the animal causes.
4. Document the request, the information received and the decision; refuse only if the specific animal poses a direct threat or the request would impose an undue burden, and check your state's rules as well.

Answer: Ask only for what is needed to verify the need, approve the reasonable accommodation without pet fees and keep a written record.

PRACTICE

1. Easy Name the seven federal protected classes under the Fair Housing Act.

   Show answer

   Race, color, religion, national origin, sex, familial status and disability. States and cities may add more.

2. Easy Is the ad phrase "perfect for a couple without kids" lawful? Explain.

   Show answer

   No. It indicates a preference against families with children, which violates the familial-status protection and the advertising rule.

3. **Easy** What is the difference between a reasonable accommodation and a reasonable modification?

Show answer

An accommodation changes a rule, policy or service (such as allowing an assistance animal); a modification is a physical change to the dwelling (such as a grab bar), generally at the tenant's expense in private housing.

4. **Medium** In this example, rent is $1,450 and the written criterion is 2.5 times the rent in gross monthly income. What income is required, and does an applicant earning $3,500 qualify?

Show answer

Required: $\$1{,}450 \times 2.5 = \$3{,}625$. $3,500 is below it, so the applicant does not meet the income criterion as written.

5. **Medium** A landlord asks one applicant for three months of bank statements but asks others only for pay stubs. What is the problem?

Show answer

That is inconsistent treatment, which can be evidence of disparate treatment. The written criteria should state what documents every applicant provides.

6. **Medium** List the items an FCRA adverse action notice must include.

Show answer

The reporting company's name, address and phone number; a statement that it did not make the decision and cannot explain it; and the applicant's right to a free copy of the report within 60 days and to dispute inaccurate information (plus credit-score details if a score was used).

7. **Medium** A landlord tells a family with two children that the only available unit is on the third floor "for their safety," though a first-floor unit is open. What is this called?

Show answer

Steering, and it is illegal under the familial-status protection. The family must be shown every available unit and allowed to choose.

8. Hard An applicant meets every criterion, but the landlord “has a bad feeling.” What should the landlord do, and why?

Show answer

Approve the applicant, because the written criteria are met. Feelings that cannot be stated as a criterion applied to everyone are exactly where hidden bias enters and where fair housing claims begin.

9. Hard A landlord requires a $500 larger deposit from one applicant because of a low credit score in a tenant screening report. Does the FCRA require a notice?

Show answer

Yes. Requiring a larger deposit than other applicants because of information in a consumer report is adverse action, so the adverse action notice is required.

10. Hard Why should screening criteria be written before the ad is posted rather than after applications arrive?

Show answer

Criteria written first cannot be shaped to fit or exclude particular people. They also tell applicants in advance what is required, which is fair and saves everyone time.

11. Challenge In this example, two roommates apply for a $2,000 unit with a 3-times income rule that counts all signers. One earns $3,900 and the other $2,300. A single applicant earning $6,100 also applies, an hour later. Both applications are complete. Who gets the unit?

Show answer

The roommates’ combined income is $6,200, above the $6,000 minimum, and their complete application came first. If they meet the other criteria, they are offered the unit.

12. **Challenge** Write three sentences explaining to a new landlord why fair, consistent screening is both right and wise.

Show answer

> Fair housing is settled law, and treating every applicant by the same written standard honors each person as a neighbor rather than a type. Consistency is also the landlord's best protection, because a documented, uniform process can be explained to anyone. And standards based on the property — income, history and care for the home — predict good tenancies far better than impressions do.

COMMON MISTAKES

- Deciding about an applicant first and finding a reason later. Write criteria before advertising and apply them as written.
- Advertising who you want instead of what you offer. Describe the property, rent, terms and policies only.
- Asking some applicants questions or documents you do not ask of others. Use the same application and process for all.
- Charging a pet fee for an assistance animal approved as a reasonable accommodation. Charge only for actual damage.
- Denying on a screening report without an adverse action notice. The FCRA requires it whenever a report contributes to the decision.
- Assuming federal law is the whole rule. States and cities often add protected classes and limits on screening; check yours.

> **Make it a game · Same Scale for Everyone.** One player writes a short set of screening criteria for a $1,500 unit (income multiple, rental history, credit rule). Others write applicant cards with income, history and household details, including some that tempt bias ("has three kids," "just moved from another country," "uses a wheelchair"). Shuffle the cards and deal them in order. For each, the landlord must decide using only the written criteria and say which criterion decided it. Any player may challenge a decision that used something not on the list; a correct challenge earns a point. Finish by rewriting any criterion that caused an argument.

> **Scripture.** “Divers weights, and divers measures, both of them are alike abomination to the LORD.” (Proverbs 20:10, KJV)
>
> In the marketplace of Proverbs, a merchant with two sets of weights cheated whoever he chose. A landlord with one standard for some applicants and another for others does the same thing to people seeking a home. Written criteria applied identically to everyone are an honest set of weights.

8.2 Leases, Deposits and Move-In

OBJECTIVES

- Identify the essential terms of a residential lease and explain the difference between a fixed-term lease and a month-to-month tenancy.
- Explain the common state rules on security deposits — limits, how they are held, return deadlines and itemized deductions — and the difference between damage and normal wear and tear.
- Name the federal lead-based paint disclosure and the kinds of state-required disclosures, and find your own state's list on an official source.
- Conduct a move-in inspection with a written condition report and dated photographs, and calculate prorated rent.
- Annotate a sample lease, marking clauses that are standard, clauses that need state-law checking and clauses that are likely unenforceable.

> **Warm-up.** Write five things you would want in writing before you lent a friend your bicycle for a whole summer — who fixes a flat, what if it is stolen, when it comes back. Now imagine the bicycle is a house worth $300,000. What would you add?

WATCH

Landlord Tenant Lease Agreement Essentials - 5 KEY LEASE CLAUSES You must Include!

Richey Property Management · 8:32

https://www.youtube.com/watch?v=ZOfSfswOzg0

> **WHEN TO WATCH**
> Watch after the third core idea. She manages in Virginia; list her five clauses, and mark each as one you would check against your own state's law.

BACKUP VIDEO

02. Moving In (Conversations about Landlord Tenant Law in Alaska)

uaajusticecenter · 3:41

https://www.youtube.com/watch?v=ht5Wer46r-0

Watch before the move-in project. It explains Alaska's rules from the tenant's side; note each move-in step it recommends and find the matching rule in your state.

KEY TERMS

lease

A contract by which an owner (the landlord or lessor) gives a tenant (the lessee) the right to possess and use a property for a period in exchange for rent.

fixed-term lease

A lease for a set period, such as twelve months, with stated start and end dates.

periodic (month-to-month) tenancy

A tenancy that renews automatically for successive periods, such as each month, until either side gives proper notice to end it.

security deposit

Money a tenant pays at the start of a tenancy to secure performance of the lease, held by the landlord and returned, less lawful deductions, after the tenant leaves.

normal wear and tear

The ordinary deterioration that comes from reasonable use over time, which generally may not be deducted from a security deposit.

itemized statement

The written list of deductions from a security deposit, with amounts, that most states require a landlord to send within a set deadline.

move-in condition report

A dated checklist of each room's condition at the start of a tenancy, signed by landlord and tenant and supported by photographs.

prorated rent

Rent charged for part of a rental period, usually computed as the daily rent times the number of days occupied.

late fee

A charge stated in the lease for rent paid after the due date and any grace period, limited in amount or timing by some states.

renter's insurance

A tenant's own policy covering the tenant's belongings and personal liability; it does not cover the landlord's building.

lead-based paint disclosure

The federal requirement that landlords of most housing built before 1978 disclose known lead-based paint and hazards and give tenants the EPA pamphlet before a lease is signed.

Uniform Residential Landlord and Tenant Act (URLTA)

A model law published in 1972 that many states adopted in whole or in part as the basis of their landlord–tenant statutes.

CORE IDEAS

The story. In 1516 the Augsburg merchant Jakob Fugger, one of the richest men in Europe, founded a small walled neighborhood of houses for needy working families of his city. Built between 1514 and 1523, the Fuggerei had 52 houses by 1523, and it is still lived in today. Its terms were written down and are kept to this day. The rent is one Rhenish guilder a year — about 88 euro cents now, never raised for inflation. Residents must have lived in Augsburg at least two years, be Catholic and be in need without debt; they pray three prayers daily for the founder's family; and the gates are locked at ten o'clock each night. Few leases have lasted five centuries, but every one of them works the same way: an owner and a tenant write down who may live there, what is paid, what is promised and what happens if a promise is broken.

How they figured it out. For centuries English and American landlord–tenant law treated a lease mainly as a transfer of land: the tenant got possession and had to pay rent whatever happened, and the landlord had few duties. As more families rented city apartments, states rewrote the rules piecemeal, and they differed widely. In 1972 the National Conference of Commissioners on Uniform State Laws published a model, the **Uniform Residential Landlord and Tenant Act**, setting out both sides' duties: limits on security deposits and deadlines for returning them, rules for entering a tenant's home, the landlord's duty to keep the dwelling fit and the tenant's duty to keep it clean and undamaged. Many states adopted all or part of it, and others wrote their own versions, so today's leases rest on a common pattern with state-by-state details. That is why every lease must be checked against your own state's statute — and why a clause that is fine in one state can be void in another.

The big idea. A **lease** is both a contract and the grant of a home, and it must say clearly what each side has promised. Essential terms include the parties (every adult occupant signs), the property, the term (a **fixed-term lease** or a **month-to-month tenancy**), the rent, due date, where and how to pay, any grace period and **late fee** your state allows, the **security deposit**, which utilities each side pays, who maintains

what (lawn, snow, filters, light bulbs), how to request repairs and what counts as an emergency, the landlord's notice before entry, rules on pets, smoking, guests and occupancy, renewal and how to give notice, and what happens at move-out. Many states also require the owner's or manager's name and address for notices. Under the statute of frauds, leases longer than a year generally must be in writing to be enforced; every lease should be written anyway. State law overrides any clause that conflicts with it, so a tenant's "waiver" of rights the statute guarantees is commonly void.

Security deposits follow state rules, and the common pattern has four parts. **Limits**: some states cap deposits (for example, at one or two months' rent), some do not. **Holding**: some states require a separate or trust account, a written receipt or interest. **Return**: after the tenant moves out, the landlord must return the deposit, less lawful deductions, with an **itemized statement** within a deadline — commonly two weeks to a month or more, depending on the state. **Deductions**: unpaid rent and damage beyond **normal wear and tear** may be deducted; ordinary aging — lightly faded paint, small nail holes, carpet worn along a walkway — generally may not. Many states penalize late or improper withholding, sometimes with double or triple damages. Some states also restrict nonrefundable fees. Read your state's statute or the attorney general's landlord–tenant guide, and remember that a deposit is the tenant's money held in trust, not the landlord's income.

Disclosures come next. For homes built before 1978, federal law requires the landlord to give the EPA pamphlet *Protect Your Family From Lead in Your Home*, disclose any known lead-based paint or hazards and records, include a lead warning statement in or with the lease, and keep a signed copy for three years; leases of 100 days or less with no renewal, zero-bedroom units and a few other cases are exempt. States add their own required disclosures — for example, about mold, flood history, bedbugs, smoking policies, shared utility meters or the deposit's location; the list varies by state, so check yours. Then comes **move-in**: walk the home together, complete a written **move-in condition report** room by room, take dated photographs or video, record meter readings, hand over keys and get a receipt, confirm utilities are transferred and give the tenant a welcome letter explaining how to pay rent and request repairs. Many landlords require **renter's insurance**, which protects the tenant's belongings and liability; check that your state allows the requirement.

Two calculations come up at every move-in and move-out. **Prorated rent** covers a partial month. In this example, a tenant moving in on the 18th of a 30-day month at $1,650 rent pays $1{,}650 \div 30 = \$55$ a day for $30 - 18 + 1 = 13$ days: $715. Some landlords divide by 365 days and multiply by 12 instead; say which method in the lease and use it for everyone. The deposit settlement comes at the end. In this example, a tenant paid an $1,800 deposit. At move-out, the condition report and photos show a carpet stain needing professional cleaning ($150), broken blinds ($85) and a large hole in a door ($60), plus the normal fading and nail holes of a three-year tenancy. The landlord deducts $\$150 + \$85 + \$60 = \$295$, returns $1,505 with an itemized statement and receipts within the state deadline, and charges nothing for ordinary wear.

Run the numbers. Leases and deposits touch the Rental worksheet in a few places. A security deposit is not income and not cash invested — it is a liability you hold for the tenant — so never count it as part of your return or use it for the down payment. Late fees, if your state allows them, are not part of the rent assumption; good tenants rarely pay them, and a worksheet that depends on them is wrong. Lease terms change expenses: if the lease makes the owner pay water and trash, enter them as owner-paid utilities; if the tenant mows, lawn care drops out of other expenses. A twelve-month lease with renewals lowers turnover and vacancy; month-to-month tenancies may turn over more often. Classic mistakes: a lease copied from the internet that breaks your state's deposit or entry rules; no move-in report, which leaves you unable to prove damage later; deducting normal wear and tear; missing the deposit-return deadline; and skipping the lead disclosure on an older house.

PICTURE STUDY



Man Writing a Letter, Gabriël Metsu, c. 1665 · Oil on panel · National Gallery of Ireland, Dublin; public domain

Image: Wikimedia Commons, public domain

Gabriël Metsu painted in Leiden and Amsterdam in the mid-1600s, and his scenes of letter writers and readers were among the finest of the Dutch Golden Age. This young man writes with great care, the paper flat on a rich carpet, the light falling on his pen. Merchants of his day lived by written agreements — letters, contracts and leases that set down exactly what each party promised. The picture opens this lesson because a lease is that kind of writing: careful words that let two people trust each other for a year.

Look closely

- Look at how closely he attends to the paper. A lease deserves the same care: every term written plainly, nothing left to memory.
- Find the globe behind the window glass. Dutch merchants made agreements with people far away; writing let strangers deal fairly.
- Notice the fine carpet and framed painting. A well-kept home and a clear agreement both protect something valuable.
- See the hat hung on the chair — he has settled in to do the work properly, not in a hurry. Move-in day should be unhurried too.

Talk about it

1. Why do people write agreements down even when they trust each other?
2. Which three lease terms would you write first, and why those?
3. Ecclesiastes 5:5 says it is better not to vow than to vow and not pay. How does that apply to a landlord who promises repairs or a deposit return in a lease?

PROJECT

Annotate a Lease and Plan a Move-In

You will read a real sample lease, mark it against your state's official landlord–tenant rules and prepare the move-in documents for a pretend tenancy. If your family rents, read your own lease with a parent; if not, use a sample lease from your state's attorney general, a state bar association or a state real estate agency.

You will need

- A sample residential lease (from an official or professional source in your state, or your family's own lease with a parent)
- Your state's landlord–tenant statute or the attorney general's landlord–tenant guide
- The EPA lead-based paint disclosure page and sample form
- Three colored pencils or highlighters, a camera or phone and a printed room-by-room checklist

Steps

1. Read the whole lease once without marking it. Then list its essential terms: parties, term, rent and due date, deposit, utilities, maintenance, entry, pets, occupancy, renewal and move-out.
2. Mark every clause green (standard), yellow (check state law) or red (likely conflicts with state law). For each yellow or red clause, find the statute section or guide page and write it in the margin.
3. From your state source, record the deposit limit (if any), how deposits must be held, the return deadline and what an itemized statement must include, with the date you checked.
4. List the disclosures your state requires and decide whether the federal lead disclosure applies to the property's year built.
5. Make a move-in condition report for one real room in your home: condition of each surface and fixture, with dated photos. Have a parent sign it as the "tenant."

6. Compute prorated rent for a pretend move-in on the 20th of a 31-day month at the rent of a real local listing.
7. File the annotated lease, the state-rule summary, the condition report and the calculation in your deal binder.

INVESTOR'S NOTEBOOK

1. Make flashcards for every key term, plus a card titled "Lease essentials" listing twelve terms every lease should cover.
2. Draw a two-column chart: "Normal wear and tear" and "Damage." Put at least six examples in each.
3. Write a trap list titled "Leases and deposits," including "State law beats the lease," "No move-in report, no proof" and "The deposit is the tenant's money."

KEY FORMULAS

$$\text{Prorated rent (30-day method)} = \frac{\text{monthly rent}}{\text{days in month}} \times \text{days occupied}$$

$$\text{Prorated rent (annual method)} = \frac{\text{monthly rent} \times 12}{365} \times \text{days occupied}$$

$$\text{Deposit refund} = \text{deposit} - \text{unpaid rent} - \text{damage beyond normal wear and tear}$$

From history. The rule that important leases must be in writing is more than three centuries old. England's Statute of Frauds of 1677 required leases for more than three years to be made in writing and signed, so that no one could claim a long tenancy on the strength of spoken words or false witnesses. American states adopted their own versions, most commonly requiring a writing for leases longer than one year. Good landlords put every lease in writing anyway.

WORKED EXAMPLES

Example 1. In this example, a tenant moves in on the 18th of a 30-day month. Rent is $1,650 a month. Find the prorated rent by the days-in-month method, and compare the annual method.

Show solution

1. Days occupied: $30 - 18 + 1 = 13$ (count the move-in day).
2. Daily rent: $\$1{,}650 \div 30 = \$55$; prorated rent $13 \times \$55 = \$715$.
3. Annual method: $\$1{,}650 \times 12 \div 365 = \$54.25$ a day; $13 \times \$54.25 = \$705.21$.
4. State the method in the lease and use it for every tenant.

Answer: $715 by the days-in-month method ($705.21 by the annual method).

Example 2. In this example, a tenant leaves after three years. The deposit was $1,800. The move-out inspection, compared with the move-in report and photos, finds: lightly faded paint and a few small nail holes; carpet worn along the hallway; a large dark stain needing professional carpet cleaning ($150); broken blinds ($85); and a fist-sized hole in a bedroom door ($60). What is refunded?

Show solution

1. Classify: faded paint, small nail holes and worn carpet path are normal wear and tear — not deductible.
2. Damage beyond normal wear: stain cleaning $150, blinds $85, door $60.
3. Deductions: $\$150 + \$85 + \$60 = \$295$.
4. Refund: $\$1{,}800 - \$295 = \$1{,}505$, sent with an itemized statement and receipts within the state's deadline.

Answer: Refund $1,505 with an itemized list of the three deductions; nothing is charged for ordinary wear.

Example 3. Annotate three clauses from a sample lease found online: (1) "Tenant waives all rights to notice before Landlord enters." (2) "Rent is due on the 1st; a late fee of $50 applies after the 5th." (3) "Tenant shall keep the premises clean and replace furnace filters every three months."

Show solution

1. Clause 1: likely unenforceable. Most states set an entry-notice rule (commonly 24 to 48 hours except in emergencies) that a tenant cannot waive; replace it with your state's rule.
2. Clause 2: standard in form, but check your state — some limit late-fee amounts or require a grace period.
3. Clause 3: standard and enforceable in most states; it assigns a routine maintenance task clearly.
4. Mark each clause green (standard), yellow (check state law) or red (likely void), and cite the statute section for any yellow or red.

Answer: Clause 1 red, clause 2 yellow, clause 3 green — and every yellow or red clause is checked against the state's official landlord–tenant statute.

PRACTICE

1. Easy What is the difference between a fixed-term lease and a month-to-month tenancy?

   Show answer

   A fixed-term lease runs for a set period with an end date; a month-to-month tenancy renews each month until either side gives the notice the law requires.

2. Easy Give two examples of normal wear and tear and two examples of damage.

   Show answer

   Wear: lightly faded paint, small nail holes, carpet worn along a walkway. Damage: holes in doors or walls, broken blinds, large stains, pet scratches through flooring.

3. **Easy** What must a landlord of a 1960 house give a new tenant under the federal lead rule?

Show answer

The EPA pamphlet, disclosure of any known lead-based paint or hazards and available records, and a lead warning statement in or attached to the lease, signed and kept for three years.

4. **Medium** In this example, a tenant moves in on the 12th of a 31-day month at $1,550 rent. Find the prorated rent by the days-in-month method.

Show answer

Days: $31 - 12 + 1 = 20$. Daily rent $\$1{,}550 \div 31 = \$50$; prorated rent $20 \times \$50 = \$1{,}000$.

5. **Medium** In this example, a $1,400 deposit; unpaid rent of $200; carpet replacement in one room that was 12 years old and worn out; a broken window ($180). What may be deducted?

Show answer

Unpaid rent $200 and the window $180, total $380; refund $1,020. A 12-year-old carpet at the end of its life is normal wear, not damage.

6. **Medium** Why is a security deposit not counted as income or as cash invested in the Rental worksheet?

Show answer

It belongs to the tenant and must be returned, less lawful deductions. It is a liability the landlord holds in trust, not money the landlord earned or invested.

7. **Medium** Name four things to do at a move-in besides signing the lease.

Show answer

Any four of: a room-by-room condition report signed by both; dated photos or video; meter readings; key handover with a receipt; utility transfer; the lead pamphlet and other disclosures if required; proof of renter's insurance; a welcome letter explaining rent payment and repair requests.

8. Hard A lease says, “Landlord may keep the entire deposit if Tenant leaves early.” Why might this be unenforceable, and what should replace it?

Show answer

Many states allow deductions only for actual unpaid rent and damage, and a blanket forfeiture may be an unlawful penalty. Replace it with a clause stating the tenant owes rent until the lease ends or the unit is re-rented, as state law provides.

9. Hard A landlord misses the state’s deposit-return deadline by three weeks. What risk does that create?

Show answer

In many states a late or missing itemized statement can cost the landlord the right to make any deductions and may bring penalties, sometimes double or triple the deposit.

10. Hard Explain why a landlord should use the same proration method and the same lease terms for every tenant.

Show answer

Consistency is fair, is easy to explain and avoids any appearance of treating tenants differently, which matters under fair housing law. It also makes bookkeeping simpler and errors easier to catch.

11. Challenge In this example, a tenant moves out on the 10th of a 30-day month after paying the full month’s $1,800 rent, as the lease allows a prorated refund for early return of keys. The annual method is in the lease. How much rent is refunded?

Show answer

Daily rent $\$1{,}800 \times 12 \div 365 = \$59.18$. Days not occupied: $30 - 10 = 20$. Refund $20 \times \$59.178 \approx \$1{,}183.56$ (or $\$1{,}183.60$ if the daily rate is rounded to cents first).

12. **Challenge** Write three sentences a landlord could say at move-in to set a good relationship with a new tenant.

Show answer

A good answer welcomes the tenant warmly, explains exactly how to pay rent and how to request repairs (and what counts as an emergency), and promises a specific response time — then says the landlord will give proper notice before entering and asks the tenant to report small problems early.

COMMON MISTAKES

- Using a lease copied from the internet without checking your state's statute. State law overrides conflicting clauses.
- Skipping the move-in condition report and photos. Without them you cannot prove damage at move-out.
- Deducting normal wear and tear from the deposit. Charge only for damage beyond ordinary use and unpaid amounts.
- Missing the deposit-return deadline or omitting the itemized statement. Many states impose penalties.
- Treating the security deposit as income or using it for expenses. It is the tenant's money held in trust.
- Forgetting the lead-based paint disclosure for a pre-1978 home. Give the pamphlet, disclose what you know and keep the signed form three years.

Make it a game · Wear or Tear?. Make twenty cards describing move-out conditions: "faded curtains after four years," "three small nail holes," "dog chewed the door frame," "carpet path worn in hallway," "cracked tile where a pan dropped," "grease on oven," "hole behind door from doorknob." Players take turns drawing a card and calling "Wear" (no deduction) or "Damage" (deduct), with a fair dollar amount for damage. The family votes; a correct call earns a point and a reasonable price earns a bonus. Discuss the close calls — they are why move-in photos matter.

Scripture. "Better is it that thou shouldest not vow, than that thou shouldest vow and not pay." (Ecclesiastes 5:5, KJV)

A lease is a set of promises, and the Preacher says an unkept promise is worse than none. A landlord who promises repairs, privacy and a fair deposit return must keep those promises exactly; a tenant who promises rent and care must too. Write only what you will do — then do it.

8.3 Maintenance, Turnovers and Capital Projects

OBJECTIVES

- Explain the implied warranty of habitability and list the conditions a rental home must commonly meet.
- Build a preventive maintenance calendar and an annual maintenance budget, and sort repair requests into emergency, urgent and routine.
- Convert a component-life table into an annual and monthly CapEx reserve and compare it with the Rental worksheet's CapEx percentage.
- Calculate the cost of a turnover and show how longer tenancies lower the annual cost of turnovers.
- Distinguish a repair from a capital improvement using the betterment, restoration and adaptation tests, as a preview of the tax rules in Unit 9.

> **Warm-up.** Walk through your own home for five minutes with a notebook. List everything that would cost money if it broke this year — the furnace, the water heater, a leaky faucet, the roof. Put a star by anything that would make the home unsafe or unlivable if it failed tonight.

WATCH

06. Landlord Responsibilities and Repairs (Conversations about Landlord Tenant Law in Alaska)

uaajusticecenter · 5:19

https://www.youtube.com/watch?v=fibhSgy4id8

> **WHEN TO WATCH**
> Watch after the second core idea. It states Alaska's rules, such as its entry notice and repair procedures; write each rule down and then look up whether your state's rule is the same.

BACKUP VIDEO

5 Essential Property Maintenance Tasks To Keep Your Rental in Tip-Top Shape | Daily Podcast

BiggerPockets · 8:42

https://www.youtube.com/watch?v=DoEibrVpb1g

Listen while building your preventive calendar (it is audio only). Add each of the five tasks to your calendar in the right month, with a cost.

KEY TERMS

implied warranty of habitability

A landlord's legal duty, read into residential leases by statute or court decision in nearly every state, to keep a rental fit and safe to live in.

housing code

Local or state rules setting minimum standards for dwellings, such as heat, plumbing, electrical safety, smoke alarms and structural soundness.

preventive maintenance

Scheduled care, such as servicing a furnace or cleaning gutters, done to prevent breakdowns and extend the life of building parts.

emergency repair

A repair needed at once to protect health, safety or the building, such as no heat in winter, a gas smell, a major leak or no water.

turnover

The process and cost of preparing a unit between tenants: cleaning, painting, repairs, rekeying, marketing and the vacant days.

useful life

The number of years a building component is expected to last before replacement, used to set the CapEx reserve.

repair

Work that keeps property in its ordinary, efficient operating condition without adding value or extending its life significantly, such as fixing a leak.

work order

A written record of a repair request: the problem, the date reported, the priority, who did the work, the cost and the date completed.

capital expenditure (CapEx)

Spending on a major component that lasts more than a year, such as a roof, furnace, water heater, flooring or appliances.

CapEx reserve

Money set aside regularly so that major replacements can be paid when they come due.

capital improvement

Work that betters, restores or adapts a property to a new use, such as a new roof or an added bathroom, generally depreciated rather than deducted at once.

CORE IDEAS

The story. In the late 1960s, tenants of the Clifton Terrace apartments in Washington, D.C., stopped paying rent, saying their landlord had let the buildings fall into disrepair. The landlord, First National Realty Corporation, sued to evict them. At trial the tenants wanted to show the housing code violations — an inspector would testify to more than a thousand of them — but the judge excluded the evidence under the old rule that a tenant's duty to pay rent did not depend on the landlord's repairs. On May 7, 1970, the federal appeals court reversed. In *Javins v. First National Realty Corp.*, Judge J. Skelly Wright wrote that the old rules came from feudal property law, made for farmland, and that a modern city apartment lease is really a contract for a decent place to live. A warranty of habitability, measured by the housing code, is

implied in such leases, and a tenant sued for nonpayment may show that the landlord broke it.

How they figured it out. After *Javins,* court after court and legislature after legislature adopted an **implied warranty of habitability**, and nearly every state now recognizes it by statute or court decision. Its exact content varies, but the common pattern requires a landlord to keep the dwelling structurally safe and weathertight, to maintain working plumbing, heat, hot water and electricity, to keep common areas safe and clean, to provide smoke and (where required) carbon-monoxide alarms and to meet the local **housing code**. States also set the tenant's side — keep the unit clean, avoid damage, use fixtures properly, report problems — and lay out what a tenant may do when a landlord will not repair, which commonly requires written notice first. Wise landlords learned that the law describes a floor, not a goal: the cheapest house to own over twenty years is the one maintained before it breaks.

The big idea. Maintenance is part of the service a landlord sells, and it comes in three kinds that must be budgeted separately. **Repairs** fix what breaks — a dripping faucet, a broken latch — and are paid from the repairs line. **Preventive maintenance** is scheduled care that keeps repairs small: servicing the furnace each fall, cleaning gutters, testing alarms, flushing the water heater, clearing the dryer vent, re-caulking tubs and windows. **Capital expenditures** replace major components at the end of their **useful life** — roofs, furnaces, water heaters, flooring, appliances, exterior paint — and are paid from a **CapEx reserve** built month by month. Every request is sorted by urgency: **emergencies** such as no heat in winter, a gas smell, a major leak or no water get a same-day response; urgent problems within a day or two; routine requests within days. Answer quickly, give the notice before entry your state requires except in a true emergency, and record every request on a **work order**.

Build a preventive calendar and price it. In this example, for a single-family rental: furnace service in the fall ($150), gutter cleaning ($200), smoke and carbon-monoxide alarm batteries and tests ($40), pest control ($300), water heater flush ($100), dryer vent cleaning ($120) and caulking and a walk-around inspection ($150) total $1,060 a year. Add a spring air-conditioning check, sprinkler winterizing or snow plans as your climate requires. Then compare with the Rental worksheet: at $1,900 rent, a 6% repairs line is $\$22{,}800 \times 0.06 = \$1{,}368$ a year, leaving about $300 for actual repairs after preventive work — a sign that 6% may be low for an older house.

Use an annual inspection (with proper notice) to catch problems early: a slow leak under a sink is a $150 repair this month and a $3,000 subfloor next year.

Turnovers are the most expensive routine event in a rental. In this example, when a tenant leaves a $1,900 house, the owner loses about a month of rent ($1,900), spends $1,200 on paint, cleaning and small repairs, $150 on advertising and screening and $100 to rekey the locks: $3,350. If tenants stay two years on average, turnovers cost $\$3{,}350 \div 2 = \$1{,}675$ a year; if they stay four years, $837.50. Prompt, respectful repairs, fair rent increases and clear communication keep good tenants, and keeping good tenants is one of the best investments a landlord makes. Use a written turnover checklist — inspection against the move-in report, deposit settlement on time, repairs, paint, deep clean, safety checks, rekey, photos and listing — so nothing is forgotten and the vacant days stay few. Work with licensed and insured trades where your state requires a license, and pay them promptly and fairly.

Plan capital projects from a component table instead of hoping. In this example: a roof costing $12,000 with a 25-year life needs $480 a year; a furnace and air conditioner, $7,000 over 15 years, $466.67; a water heater, $1,500 over 12 years, $125; flooring, $6,000 over 10 years, $600; appliances, $3,000 over 12 years, $250; exterior paint, $5,000 over 8 years, $625. The total is $2,546.67 a year, $212.22 a month — 11.2% of $22,800 rent, well above the worksheet's 7% default for this older house. Schedule the big items, get bids before they fail, and draw on the reserve when they come due. For taxes, a **repair** that keeps the property in ordinary condition is generally deducted in the year paid, while a **capital improvement** — one that betters the property, restores it (such as replacing a whole roof) or adapts it to a new use — is generally depreciated over time (Unit 9). That is education, not tax advice.

Run the numbers. Two Rental worksheet inputs carry this lesson: repairs and maintenance (% of rent) and CapEx (% of rent). Set them from evidence: the property's age and condition, the preventive calendar and a component table built from the inspection report. A 1950s house with an original water heater and a 20-year-old roof deserves more than a new one — and even a new roof is not a reason to set CapEx to zero, because it will need replacing within the life of the loan and every other component keeps aging. Turnover costs belong partly in vacancy (the empty month) and partly in repairs (paint and cleaning). Track actual spending each year and compare it with the worksheet; adjust next year's numbers to the truth. Classic mistakes: "the roof is new, so CapEx is zero"; using the CapEx reserve for everyday

repairs until it is empty; skipping preventive work to “save” money; slow responses that drive good tenants away; and treating habitability repairs as optional when rent is late — the duty to repair does not pause.

PICTURE STUDY



House Painters (Peintres en bâtiment), Gustave Caillebotte, 1877 · Oil on canvas · Private collection; public domain

Image: Wikimedia Commons, public domain

Gustave Caillebotte was a French painter, an Impressionist and a patron of other artists, who loved to paint ordinary Parisians at work in the new city of wide boulevards and tall apartment buildings. Here painters refresh a shopfront, the kind of work that keeps a building sound and attractive year after year. The man on the sidewalk studies the job as a careful owner or foreman would. The picture opens this lesson because maintenance is not glamorous, but it is how buildings — and the trust of the people who live in them — last.

Look closely

- Find the man on the tall ladder. Maintenance has its own safety rules; owners should hire trades who work safely and carry insurance.
- Look at the worker standing back to inspect. Good maintenance includes stepping back to check the work before paying for it.
- Study the long row of apartment buildings. Every one of them needs paint, roofs and repairs on a schedule — the CapEx table in real life.
- Notice the calm, steady pace of the scene. Preventive work is done before an emergency, not in a panic after one.

Talk about it

1. Which items on a rental's preventive calendar are like this repainting — done before anything has failed?
2. How would you decide whether repainting a building's exterior is a repair or a capital improvement?
3. Proverbs 24:30–31 describes a neglected field with its stone wall broken down. What does faithful maintenance say about the character of a landlord?

PROJECT

The Maintenance Plan and CapEx Table

You will build a twelve-month maintenance plan and a component-by-component CapEx table for one real rental listing (or your family's own home, with a parent), and use them to set the repairs and CapEx inputs in the Rental worksheet.

You will need

- A real rental or for-sale listing with photos and the year built (or your own home)
- Local prices for common services and replacements (from store or contractor websites, as examples)
- A spreadsheet and the Deal Analyzer's Rental worksheet
- Your state's landlord–tenant guide section on repairs and habitability

Steps

1. From your state's guide, list the landlord's habitability duties and the tenant's duties, with the source and date.
2. Make a month-by-month preventive maintenance calendar for the property's climate, with a cost for each task. Total it.
3. List every major component — roof, heating and cooling, water heater, flooring, appliances, exterior paint, windows, driveway — with an estimated age, replacement cost and useful life. Compute each annual reserve and the total.
4. Convert the total to a monthly reserve and a percentage of the property's market rent.
5. Estimate one turnover's cost and the annual cost at two-year and four-year average tenancies.
6. Run the Rental worksheet twice: once with the default 6% repairs and 7% CapEx, once with your evidence-based percentages. Record the change in monthly cash flow.

7. Print both worksheets and the tables, write a one-paragraph verdict on whether the property is still a good deal with honest maintenance numbers, and file everything in your deal binder.

INVESTOR'S NOTEBOOK

1. Make flashcards for every key term, plus a card with the three tests of a capital improvement: betterment, restoration, adaptation.
2. Draw a year-wheel divided into twelve months and write each preventive task in its month.
3. Write a trap list titled "Maintenance," including "New roof does not mean zero CapEx," "Repairs and CapEx are different buckets" and "Fast repairs keep good tenants."

KEY FORMULAS

$$\text{Annual CapEx for a component} = \frac{\text{replacement cost}}{\text{useful life (years)}} \qquad \text{Monthly} = \frac{\text{annual}}{12}$$

$$\text{CapEx as \% of rent} = \frac{\text{total annual CapEx}}{\text{annual gross rent}}$$

$$\text{Turnover cost} = \text{vacant rent} + \text{make-ready} + \text{marketing and screening} + \text{rekey}$$

$$\text{Annual turnover cost} = \frac{\text{cost per turnover}}{\text{average tenancy in years}}$$

From history. Housing codes grew up in crowded cities. New York's tenement law of 1879, later called the "Old Law," required every room to have a window opening to outside air, which builders met with narrow air shafts. The Tenement House Act of 1901, the "New Law," went further, requiring courtyards rather than air shafts and a toilet in each new apartment, and adding toilets to older buildings. Codes like these became the measure of habitability that courts such as *Javins* later read into leases.

WORKED EXAMPLES

Example 1. In this example, a rental's components and costs are: roof $12,000 (25 years), furnace and A/C $7,000 (15), water heater $1,500 (12), flooring $6,000 (10), appliances $3,000 (12), exterior paint $5,000 (8). Rent is $1,900 a month. Find the annual and monthly CapEx reserve and its percentage of rent.

Show solution

1. Per component: $\$480 + \$466.67 + \$125 + \$600 + \$250 + \$625$.
2. Annual total: $\$2{,}546.67$; monthly $\$2{,}546.67 \div 12 = \$212.22$.
3. Annual rent: $\$1{,}900 \times 12 = \$22{,}800$.
4. CapEx %: $\$2{,}546.67 \div \$22{,}800 = 11.2\%$; enter about 11% in the Rental worksheet.

Answer: $2,546.67 a year, $212.22 a month, about 11% of rent — far more than a 5% guess.

Example 2. In this example, each turnover of a $1,900 house costs one month of rent, $1,200 of make-ready, $150 of marketing and screening and $100 of rekeying. Compare the annual turnover cost when tenants stay 2 years and when they stay 4 years.

Show solution

1. Cost per turnover: $\$1{,}900 + \$1{,}200 + \$150 + \$100 = \$3{,}350$.
2. Two-year tenancies: $\$3{,}350 \div 2 = \$1{,}675$ a year.
3. Four-year tenancies: $\$3{,}350 \div 4 = \$837.50$ a year.
4. Savings from keeping tenants twice as long: $837.50 a year — about 3.7% of rent.

Answer: Turnovers cost $1,675 a year at two-year tenancies and $837.50 at four. Good service that keeps tenants pays.

Example 3. Classify each as a repair or a capital improvement (betterment, restoration or adaptation): (1) replacing a cracked window pane; (2) replacing the entire roof; (3) adding a deck; (4) patching a small roof leak; (5) converting a garage into a bedroom.

Show solution

1. (1) Repair — it keeps the window in ordinary working condition.
2. (2) Capital improvement — restoration: it replaces a major component of the building.
3. (3) Capital improvement — betterment: it adds something new that increases value.
4. (4) Repair; (5) capital improvement — adaptation to a new use.

Answer: Repairs: 1 and 4. Improvements: 2 (restoration), 3 (betterment) and 5 (adaptation). Unit 9 explains how each is treated for taxes.

PRACTICE

1. Easy Name four conditions the implied warranty of habitability commonly requires.

   Show answer

   Any four of: a structurally safe, weathertight building; working plumbing, heat, hot water and electricity; safe common areas; required smoke and carbon-monoxide alarms; and compliance with the local housing code.

2. Easy Sort these by urgency: a gas smell; a dripping bathroom faucet; no heat in January; a loose cabinet door.

   Show answer

   Emergency: the gas smell and no heat in January. Routine: the dripping faucet and the loose cabinet door.

3. Easy What is the difference between a repair and a capital expenditure?

   Show answer

   A repair fixes something to keep it working in its ordinary condition; a capital expenditure replaces or adds a major component that lasts years, such as a roof or furnace.

4. Medium In this example, a furnace costs $6,000 and lasts 15 years. What annual and monthly reserve does it need?

Show answer

$6,000 ÷ 15 = $400 a year; $400 ÷ 12 = $33.33 a month.

5. Medium In this example, a duplex's CapEx table totals $3,600 a year, and the two units rent for $1,250 each. What CapEx percentage belongs in the Rental worksheet?

Show answer

Annual rent $1,250 × 2 × 12 = $30,000; CapEx $3,600 ÷ $30,000 = 12%.

6. Medium In this example, a turnover costs $3,000 and tenants stay an average of 18 months. What is the annual turnover cost?

Show answer

$3,000 ÷ 1.5 = $2,000 a year.

7. Medium A seller says, "The roof is two years old, so you can set CapEx to zero." Write two sentences in reply.

Show answer

The roof will still need replacing within the life of a 30-year loan, so its reserve starts now. Every other component — furnace, water heater, flooring, appliances — keeps aging regardless of the roof.

8. Hard In this example, a rental's preventive maintenance costs $1,100 a year and actual repairs averaged $1,400 over three years. Rent is $1,800. What repairs percentage do the records support?

Show answer

Total $1,100 + $1,400 = $2,500; annual rent $21,600; $2,500 ÷ $21,600 ≈ 11.6% . The 6% default is too low for this house.

9. Hard A tenant is two weeks late with rent and the water heater fails. May the landlord wait to replace it until the rent is paid?

Show answer

No. The habitability duty to provide hot water does not depend on rent being current; the landlord must make the repair and address the late rent separately through lawful notice and collection.

10. Hard Classify and explain: replacing all the old single-pane windows in a house with new double-pane windows.

Show answer

A capital improvement: it replaces a major building component and betters the property's efficiency. It would generally be depreciated, not deducted at once; replacing one broken pane would be a repair.

11. Challenge In this example, raising CapEx in the Rental worksheet from 7% to 11% on $22,800 of rent changes what, and by how much?

Show answer

CapEx rises from $1,596 to $2,508, an increase of $912 a year. NOI and cash flow each fall by $912 a year, or $76 a month.

12. Challenge A landlord says, "Preventive maintenance is a waste — I fix things when they break." Give two numerical or practical reasons he is wrong.

Show answer

Small problems caught early cost far less than failures (a $150 leak repair versus a $3,000 subfloor); serviced equipment lasts longer, lowering CapEx; and fast, planned care keeps tenants longer, which in the lesson's example saves $837.50 a year in turnovers.

COMMON MISTAKES

- Setting CapEx to zero because a component is new. Every component ages; build a reserve for all of them.
- Paying everyday repairs out of the CapEx reserve. Keep repairs and capital replacements in separate budget lines.
- Skipping preventive maintenance to save money. Small scheduled costs prevent large failures.
- Responding slowly to repair requests. Delays break habitability duties, damage the building and drive good tenants away.
- Entering without the notice state law requires for non-emergency repairs. Give proper notice and enter at reasonable times.
- Deducting a capital improvement as a repair. A new roof or added room is generally depreciated; ask a tax professional.

Make it a game · The Repair-Call Year. Each player owns the lesson's $1,900 house with a $1,368 repairs budget and a $2,547 CapEx reserve. Each turn is a season: roll one die for repair calls (1–2: a $150 call; 3–4: two calls; 5: a $600 repair; 6: a major failure — roll again: odd, $1,500 water heater from CapEx; even, $7,000 furnace from CapEx). Before rolling, a player may spend $265 on preventive maintenance that season, which turns any 6 into a 4. After four seasons, compare leftover budgets. Discuss whether prevention paid.

Scripture. "I went by the field of the slothful, and by the vineyard of the man void of understanding; And, lo, it was all grown over with thorns, and nettles had covered the face thereof, and the stone wall thereof was broken down." (Proverbs 24:30–31, KJV)

The wise man walks past a neglected property and reads its owner's character in the thorns and the broken wall. A rental shows the same thing: deferred maintenance is visible, and it falls on the families who live there. Faithful, scheduled care is how a landlord keeps the wall standing.

8.4 Rent Collection, Hard Conversations and Eviction as a Last Resort

OBJECTIVES

- Design a rent collection system with a clear due date, convenient payment methods, a lawful grace period and late fee, and prompt written notice.
- Conduct a hard conversation about late rent with kindness and firmness, offer a written payment plan where wise and point tenants to local help.
- Outline the lawful eviction process — notice, court filing, service, hearing, judgment and enforcement by a sheriff or marshal — and explain why self-help is illegal.
- Calculate the cost of a nonpayment and eviction and show its effect on the Rental worksheet's vacancy and credit-loss assumption.
- Keep the written records — ledgers, notices, messages and agreements — that make fair dealing provable.

> **Warm-up.** Imagine you lent a friend $50 and the day to repay it has passed. Write the exact words you would say to ask for it. Then rewrite them twice: once more kindly, once more firmly. Which version would you want to hear if you were the one who owed?

WATCH

How to Evict a Tenant: The Process Explained For Landlords

Coach Carson · 18:24

https://www.youtube.com/watch?v=UkqL8YPueik

> **WHEN TO WATCH**
> Watch after the third core idea. Note what he says to try before filing, then write each legal step he describes in order beside the lesson's six steps.

BACKUP VIDEO

09. Eviction Process (Conversations about Landlord Tenant Law in Alaska)

uaajusticecenter · 5:56

https://www.youtube.com/watch?v=yAqO5Hc8W4s

Watch after the fourth core idea. List Alaska's steps and notice periods as described, then compare them with the steps you find for your own state in the project.

KEY TERMS

rent ledger

A running record of every charge and payment for a tenancy, showing the balance owed at any time.

grace period

The days after the due date during which rent may be paid without a late fee, as set by the lease and any state law.

pay-or-quit notice

A written notice, in the form and time state law requires, telling a tenant to pay overdue rent or leave by a stated date.

cure-or-quit notice

A written notice requiring a tenant to fix a lease violation other than nonpayment, or leave, within the time state law allows.

payment plan

A written agreement letting a tenant pay overdue rent in installments along with current rent.

eviction (unlawful detainer, forcible entry and detainer)

The court process by which a landlord recovers possession of a rental from a tenant; its name varies by state.

self-help eviction

An illegal attempt to remove a tenant without a court order, such as changing locks, removing doors or belongings or shutting off utilities.

judgment for possession

A court's order that the landlord is entitled to possession of the property.

writ of possession (restitution)

The court document that authorizes a sheriff or marshal to remove a tenant who has not left after a judgment.

retaliation

An illegal action against a tenant, such as raising rent or starting an eviction, because the tenant complained to authorities or exercised a legal right.

cash for keys

A voluntary written agreement in which a landlord pays a tenant to move out by a certain date, avoiding a court eviction.

credit loss

Rent that is owed but never collected, budgeted with vacancy in the Rental worksheet.

CORE IDEAS

The story. On March 26, 1862, the American-born banker George Peabody, who had made his fortune in London, announced in a letter to *The Times* a gift of £150,000 to "ameliorate the condition of the poor and needy of this great metropolis, and to promote their comfort and happiness." His trustees decided to build homes. On February 29, 1864, the first Peabody block opened on Commercial Street in Spitalfields: designed by H. A. Darbishire and built for £22,000, it held 57 dwellings, nine shops and baths and laundries on the upper floor. The rules were strict. Rent was due every week, on time; a night curfew was kept; tenants were expected to keep moral standards; certain trades could not be carried on in the flats. Some thought the rules hard, but the rents paid for running and repairing the buildings, and Peabody raised his gift to £500,000 shortly before his death in 1869. By 1882 the trust housed more than 14,600 people in 3,500 dwellings. Faithful rent collection was not the enemy of the charity; it was part of what kept people housed.

How they figured it out. The law had long before decided how a landlord may — and may not — remove a tenant. England's Forcible Entry Act of 1381 made it an offense to enter lands "with strong hand" or a crowd of people, even by someone with a legal

right to enter; a right to property was to be enforced peaceably and through the law. American states built on that rule with summary court proceedings — called forcible entry and detainer, unlawful detainer or simply eviction — that give landlords a relatively quick way to recover possession through a judge, and with statutes that forbid **self-help**. Today, in nearly every state, a landlord who changes the locks, removes doors or belongings, shuts off utilities or threatens a tenant to force a move-out breaks the law and may owe the tenant damages. The court is not the landlord's first tool; it is the lawful last one.

The big idea. Rent collection is a system, and eviction is its last, rare step. The system starts at move-in: a clear due date, convenient payment (online payments create their own record), a **grace period** and **late fee** only as the lease and state law allow, and a **rent ledger** for every tenancy. When rent is late, the landlord acts promptly and personally: a friendly reminder, then a conversation, then the written notice your state requires. Many late payments come from real trouble — a lost job, an illness, a car repair — and a kind, firm landlord listens, asks what the tenant can pay and when, and may offer a written **payment plan** while pointing the tenant to help such as local rental-assistance programs, charities, churches or legal-aid offices. Kindness does not mean letting debts grow for months; firmness does not mean harshness. Both are kept in writing, and every tenant is treated by the same policy.

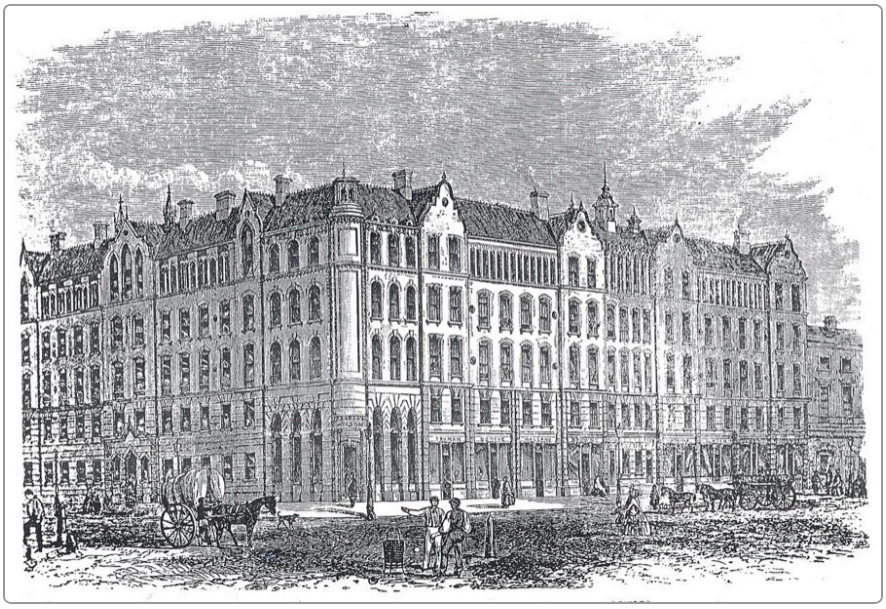
When a tenancy cannot be saved, the lawful process follows a common pattern, though names, forms and timelines differ by state. **Notice**: a written **pay-or-quit** notice for unpaid rent, a **cure-or-quit** notice for other violations, or, where state and local law allow, a notice ending the tenancy, each in the exact form and time the law requires (commonly from a few days to two weeks or more for nonpayment). **Filing**: if the tenant neither pays nor leaves, the landlord files a complaint in the proper court. **Service**: the tenant is formally served with the summons. **Hearing**: both sides may appear; the tenant may raise defenses such as improper notice, retaliation or failure to repair. **Judgment**: if the landlord wins, the court enters a **judgment for possession** and often money owed. **Enforcement**: if the tenant still does not leave, a sheriff or marshal carries out a **writ of possession**. The whole process commonly takes weeks to months. **Retaliation** — evicting or raising rent because a tenant reported code violations or used a legal right — is illegal in most states.

Some states and cities add steps — required mediation, longer notices, just-cause rules or right-to-counsel programs — and accepting partial rent after a notice can affect the case in some states, so read your state's statute or court self-help pages before acting, and consider a landlord–tenant attorney for any filing. A lawful alternative is a voluntary written move-out agreement, often called **cash for keys**: the landlord pays the tenant a sum, and perhaps waives part of the debt, in exchange for leaving clean by a set date. It must be truly voluntary, never pressured. Through all of it, document everything: the ledger, every notice with how and when it was delivered, every message and every agreement. Records protect both sides, help a judge see the truth and keep a landlord honest with himself about whether he has treated this tenant as he treats every other.

Count the cost. In this example, rent is $1,700. A tenant pays nothing for three months before a judgment and move-out: $3 \times \$1{,}700 = \$5{,}100$ of lost rent. Court costs, service and an attorney cost about $1,500 (an example; fees vary widely). Repairs and cleaning after move-out cost $1,200, and re-renting takes one more month, $1,700. The total is $9,500. The $1,700 security deposit can be applied as state law allows, leaving $7,800 lost — and judgments for the rest are often hard to collect. If such an event happened once every five years, it would cost $\$9{,}500 \div 5 = \$1{,}900$ a year, or $\$1{,}900 \div \$20{,}400 = 9.3\%$ of the year's rent. That is why careful screening, early conversations and a workable payment plan are usually far cheaper than an eviction, as well as kinder.

Run the numbers. The Rental worksheet's vacancy percentage includes credit loss — rent owed and never collected. A 6% vacancy figure (about three weeks a year) assumes tenants who pay; in a market or property where nonpayment is more common, raise it, and stress-test with the lesson's figure of about 9 extra points for an occasional eviction. Keep at least several months of expenses and debt service in reserves, because a nonpaying tenant does not pause the mortgage, taxes or insurance. Late fees are not a profit line; leave them out of income. Build legal costs into other expenses if you own several units. Classic mistakes: letting rent go unpaid for months before acting; accepting a vague promise instead of a written plan; using a notice form from another state; threatening a lockout or shutting off utilities; refusing to repair because rent is late; and forgetting that every lost month still carries the full mortgage payment.

PICTURE STUDY



The Peabody Dwellings for the Industrious Poor, Commercial Street, Spitalfields, Unknown engraver, after the design of the architect H. A. Darbishire, 1863 · Wood engraving, published in the *Illustrated London News*, July 18, 1863 · Published in London; public domain

Image: Wikimedia Commons, public domain

The *Illustrated London News* published this engraving in July 1863, a few months before the first Peabody block opened in Spitalfields. Its readers saw something new: a large, solid, fireproof-looking building put up not for profit but to house working families decently, with shops below and laundries above. The building opens this lesson because it stood on a bargain between landlord and tenant that every rental still depends on — a safe, well-kept home on one side, and rent paid faithfully on the other.

Look closely

- Count the rows of windows. Each one belonged to a family whose weekly rent kept the building running.
- Find the shopfronts on the ground floor. Shop rents helped carry the costs of the dwellings above.
- Look at the steep roofs and chimneys. Roofs and chimneys need repair on a schedule, and only collected rent pays for it.
- Notice the people in the street. A building like this changes a neighborhood, and how it is run — fairly or harshly — is felt by everyone around it.

Talk about it

1. Why might a charity that wanted to help the poor still insist that rent be paid every week, on time?
2. Peabody's rules were strict. Which rules in a modern lease protect the tenants themselves, and which protect the building?
3. Proverbs 3:27–28 says not to tell a neighbor "Go, and come again" when you can pay. How does this verse speak to both tenants who owe rent and landlords who owe repairs?

PROJECT

The Collection Policy and the Eviction Cost Sheet

You will write a complete rent collection policy for a pretend rental, outline your state's lawful eviction process from official sources and compute what a nonpayment would cost in the Rental worksheet. Everything is research and pretend; contact no tenant or court.

You will need

- Your state court system's landlord–tenant or eviction self-help pages, and the state landlord–tenant statute
- A list of local help for tenants (rental-assistance programs, legal aid, 211 or similar), from official or charity websites
- The Deal Analyzer's Rental worksheet for a property in your deal binder
- A word processor or notebook

Steps

1. Write a one-page rent collection policy: due date, payment methods, grace period and late fee (only as your state allows), when reminders and notices go out and how payment plans are offered — the same for every tenant.
2. From official sources, write your state's eviction steps in order, with the name of each notice, its required time and how it must be delivered, the court and the officer who enforces a writ. Record the source and date.
3. List what self-help actions your state forbids and any penalties, and whether your state protects tenants from retaliation.
4. Write a short script for a first conversation with a tenant who is behind: what you will say, what you will ask and which local resources you will mention.
5. Draft a sample payment-plan agreement for a one-month arrearage paid over four months.
6. Compute the cost of a three-month nonpayment and eviction at the property's rent, using your own estimates of legal and repair costs. Rerun the Rental worksheet with vacancy raised by the annual allowance and record the change in cash flow.

7. File the policy, process outline, script, plan and worksheets in your deal binder.

INVESTOR'S NOTEBOOK

1. Make flashcards for every key term, and one card listing the six eviction steps in order: notice, filing, service, hearing, judgment, enforcement.
2. Draw a flowchart from "Rent due" to "Rent paid" or "Lawful eviction," with every branch: reminder, conversation, payment plan, notice, filing, court.
3. Write a trap list titled "Rent and eviction," including "Never change the locks," "Never shut off utilities," "Repairs don't pause when rent is late" and "Write it down."

KEY FORMULAS

$$\text{Cost of nonpayment and eviction} = \text{lost rent} + \text{legal costs} + \text{repairs} + \text{re-rent vacancy}$$

$$\text{Net loss} = \text{total cost} - \text{deposit applied (as state law allows)}$$

$$\text{Annual allowance} = \frac{\text{total cost}}{\text{years between events}} \qquad \text{As \% of rent} = \frac{\text{annual allowance}}{\text{annual gross rent}}$$

$$\text{Payment-plan installment} = \frac{\text{overdue balance}}{\text{number of months}} \ \text{(paid with current rent)}$$

From history. For centuries in England, rents for land and houses were commonly due on the four "quarter days" — Lady Day (March 25), Midsummer Day (June 24), Michaelmas (September 29) and Christmas (December 25). Tenants knew the dates as well as their own birthdays, and landlords' stewards sat on rent days to receive payments and hear complaints. Today's monthly due date and online payment are newer forms of the same old idea: a clear, known day when rent is paid.

Example 1. In this example, rent is $1,700. A tenant pays nothing for three months before a judgment and move-out; legal costs are $1,500, repairs and cleaning $1,200 and re-renting takes one month. The deposit is $1,700. Find the total cost, the net loss and the annual allowance if such an event happens once in five years.

Show solution

1. Lost rent: $3 \times \$1{,}700 = \$5{,}100$.
2. Total: $\$5{,}100 + \$1{,}500 + \$1{,}200 + \$1{,}700 = \$9{,}500$.
3. Net of deposit: $\$9{,}500 - \$1{,}700 = \$7{,}800$.
4. Annual allowance: $\$9{,}500 \div 5 = \$1{,}900$; as a share of rent $\$1{,}900 \div \$20{,}400 = 9.3\%$.

Answer: Total $9,500; net $7,800 after the deposit; about 9 points of vacancy and credit loss if it happens every five years.

Example 2. In this example, a reliable tenant of three years loses her job and falls one month ($1,700) behind. She has found new work starting next month. Design a written payment plan to clear the balance in four months, and show the monthly payment.

Show solution

1. Installment: $\$1{,}700 \div 4 = \$425$.
2. Monthly payment for four months: $\$1{,}700 + \$425 = \$2{,}125$, due on the regular date.
3. The written plan lists the balance, the four due dates and amounts, and what happens if a payment is missed, as state law allows; both sign and date it.
4. Record each payment in the ledger, give the tenant a receipt and offer the same kind of plan to any tenant in similar circumstances.

Answer: $2,125 a month for four months clears the $1,700 balance — cheaper and kinder than a $9,500 eviction.

Example 3. A tenant is two months behind and will not answer calls. Frustrated, the landlord proposes four options: (1) change the locks while the tenant is at work; (2) shut off the water; (3) deliver the written notice state law requires and, if unpaid, file in court; (4) offer a voluntary written move-out agreement. Which are lawful?

Show solution

1. Option 1 is a self-help lockout — illegal in nearly every state, exposing the landlord to damages.
2. Option 2 is a utility shutoff to force a move-out — also illegal self-help, and a habitability violation.
3. Option 3 is the lawful path: proper notice, then the court process if needed.
4. Option 4 is lawful if truly voluntary and in writing; it can be offered alongside option 3.

Answer: Only options 3 and 4 are lawful. The court process and voluntary agreements are the landlord's tools; force is never one of them.

PRACTICE

1. Easy List the six steps of the lawful eviction process in order.

Show answer

Written notice, court filing, service of the summons, hearing, judgment for possession and enforcement of the writ by a sheriff or marshal.

2. Easy Name three forms of illegal self-help eviction.

Show answer

Any three of: changing or removing locks, removing doors or windows, removing the tenant's belongings, shutting off utilities and threatening or harassing the tenant to leave.

3. Easy What is retaliation, and why is it illegal?

Show answer

Punishing a tenant — by eviction, rent increases or reduced services — for complaining to authorities or exercising a legal right. It is illegal in most states because it would discourage tenants from reporting unsafe conditions.

4. Medium In this example, a tenant owes $1,500 and agrees to repay it over 3 months with current rent of $1,500. What is each monthly payment?

Show answer

Installment $\$1{,}500 \div 3 = \$500$; each payment $\$1{,}500 + \$500 = \$2{,}000$.

5. Medium In this example, an eviction costs $8,400 in total and is expected once every 6 years on a $1,600-a-month rental. What annual allowance and vacancy percentage does it add?

Show answer

$\$8{,}400 \div 6 = \$1{,}400$ a year; $\$1{,}400 \div \$19{,}200 \approx 7.3\%$ of the year's rent.

6. Medium Why should a landlord respond to late rent within days rather than waiting two months?

Show answer

Debts grow quickly and become harder to repay, and early conversations find solutions while they are still possible. Waiting also adds months of lost rent if the tenancy ends in court.

7. Medium What is cash for keys, and what makes it lawful?

Show answer

A voluntary written agreement in which the landlord pays the tenant to leave by a set date, often waiving some debt. It is lawful only if truly voluntary and documented, with no pressure or threats.

8. Hard A tenant behind on rent reports a broken furnace in January. What must the landlord do?

Show answer

Repair the furnace promptly, because the habitability duty does not depend on rent being current. The late rent is handled separately through lawful notice and collection; withholding repairs could also look like retaliation.

9. Hard In this example, rent is $1,800 and the mortgage, taxes and insurance total $1,450 a month. If a tenant pays nothing for four months during an eviction, how much must the owner pay from reserves for those costs alone?

Show answer

$4 \times \$1{,}450 = \$5{,}800$, before legal costs or repairs — a reason to hold several months of expenses in reserve.

10. Hard Why does a landlord need to use the exact notice form and timeline his state requires?

Show answer

An eviction case generally depends on proper notice; a wrong form, a short deadline or improper delivery can get the case dismissed, forcing the landlord to start over and lose more months of rent.

11. Challenge In this example, rent is $2,000. Option A: an eviction that takes 4 months of lost rent, $2,000 of legal costs, $1,500 of repairs and 1 month to re-rent. Option B: a voluntary agreement paying the tenant $1,500 to leave clean in 3 weeks, with 1 month to re-rent and $500 of cleaning. Compare the costs.

Show answer

A: $\$8{,}000 + \$2{,}000 + \$1{,}500 + \$2{,}000 = \$13{,}500$. B: about $\$1{,}500 + \$1{,}400 + \$500 + \$2{,}000 = \$5{,}400$ (three weeks of lost rent is about $\$2{,}000 \times 12 \div 52 \times 3 \approx \$1{,}400$). B saves about $8,100 and spares both sides a court case.

12. Challenge Write three sentences a landlord could say to open a conversation with a tenant who is a month behind.

Show answer

A good answer greets the tenant by name and states the facts calmly (the amount and the date); asks what has happened and what the tenant can pay and when; and explains, kindly but clearly, the next step the policy requires, while offering local resources and a written plan if it is workable.

COMMON MISTAKES

- Waiting months to act on unpaid rent. Follow the written policy promptly, beginning with a conversation.
- Changing locks, removing doors or belongings or shutting off utilities. Self-help eviction is illegal; use notice and the courts.

- Using a notice form or deadline from another state. Follow your own state's exact requirements.
- Delaying repairs because rent is late. Habitability duties continue, and withholding them can look like retaliation.
- Accepting vague promises instead of a written payment plan. Put amounts and dates in writing, signed by both.
- Leaving credit loss and reserves out of the numbers. Budget vacancy for nonpayment and hold several months of expenses.

Make it a game · Kind and Firm. Write ten tenant situations on cards: "one week late, first time," "lost job, new one starts in a month," "late every month by ten days," "won't answer the phone," "broke a window and won't pay," "wants to move out early." Each player draws a card and has one minute to say exactly what a landlord should say and do next — the conversation, the written step and any help to offer. Others score the answer 1–3 for kindness and 1–3 for firmness, and deduct all points for any illegal step. Highest total after two rounds wins.

Scripture. "Withhold not good from them to whom it is due, when it is in the power of thine hand to do it. Say not unto thy neighbour, Go, and come again, and to morrow I will give; when thou hast it by thee." (Proverbs 3:27–28, KJV)

The proverb binds both sides of a lease. The tenant who has the rent should not put the landlord off, and the landlord who owes repairs, a deposit refund or a fair hearing should not delay them either. Rent collection done this way is honest dealing between neighbors, not a contest.

8.5 Self-Manage or Hire a Manager

OBJECTIVES

- List the services a property manager provides and the common fee structures — a percentage of collected rent, leasing and renewal fees and maintenance markups.
- Calculate a manager's total annual cost for a rental and express it as a percentage of gross scheduled income.
- Estimate the hours self-management takes and the value of that time per hour, and decide when self-managing makes sense.
- Read a property management agreement and identify its key terms and red flags, including termination, repair limits and handling of trust funds.
- Explain why managing property for others commonly requires a license, and verify a manager's license on an official state site.

> **Warm-up.** Write down how many hours a month you think it takes to manage one rented house: answering calls, collecting rent, arranging repairs, showing the house when it is empty. Then write what you would charge a neighbor per hour to do it for them. Multiply. Keep the number to test against the lesson.

WATCH

The Pros and Cons of Hiring a Property Manager (Is It Worth It?)

Real Estate Rookie · 11:02

https://www.youtube.com/watch?v=mYk89SMhvAA

> **WHEN TO WATCH**
> Watch after the third core idea. Make two columns, pros and cons, and add the dollar cost from the lesson's worked example beside the fee he mentions.

BACKUP VIDEO

Should I HIRE A PROPERTY MANAGER or is DIY PROPERTY MANAGEMENT a better OPTION? THERE'S A 3RD OPTION

Darren Voros · 13:26

https://www.youtube.com/watch?v=JXQRa5DlkNE

Watch during the project. Write down his "third option," and decide whether it would work for the property in your deal binder.

KEY TERMS

property manager

A person or firm hired by an owner to run a rental — leasing, rent collection, maintenance, accounting and legal compliance — for a fee.

management agreement

The written contract between an owner and a property manager that sets the manager's duties, authority, fees, term and termination rights.

management fee

The manager's ongoing fee, commonly a percentage of rent actually collected (for example, 8–12%).

leasing (placement) fee

A fee charged when the manager finds and signs a new tenant, commonly a share of one month's rent.

renewal fee

A fee some managers charge when an existing tenant signs a lease renewal.

maintenance markup

A percentage some managers add to repair invoices they arrange, which should be disclosed in the agreement.

trust (escrow) account

A separate bank account in which a manager must hold owners' rents and tenants' security deposits, apart from the manager's own money.

commingling

Mixing clients' or tenants' money with one's own funds, which license laws and professional codes forbid.

owner statement

The manager's regular report to the owner showing rent collected, expenses paid, fees and the amount sent to the owner.

repair authorization limit

The dollar amount above which a manager must get the owner's approval before ordering a repair, except in emergencies.

self-management

An owner running his or her own rental without a hired manager.

CORE IDEAS

The story. In the early 1930s the Great Depression left many American owners unable to pay their mortgages, and many buildings were taken back by lenders.

Owners and lenders alike needed managers they could trust with other people's money. In 1933 a group of about a hundred property management firms petitioned the National Association of Real Estate Boards to form a professional body, the Institute of Real Estate Management. To join, each firm pledged to follow ethical standards: it would not **commingle** clients' funds with its own but would keep separate accounts for them, it would carry a fidelity bond on employees who handled money, and it would not profit from client funds without full disclosure. The new profession began with a simple promise: the manager's honesty with the owner's money comes first.

How they figured it out. Over the following decades, states wrote the same principles into law. In many states, managing rental property for others for pay is a real estate activity that requires a real estate broker's license or a separate property-management license, though a few states exempt it and an owner managing his own property generally needs no license. License laws commonly require managers to hold rents and security deposits in **trust accounts**, keep records the state can audit and work under a written **management agreement**. Managers developed standard practices — written screening criteria applied to all, owner statements each month, repair authorization limits, annual inspections — and standard fees. Small investors, for their part, learned the trade-off the BiggerPockets community still debates: hiring a manager costs money but buys time, distance and expertise; managing yourself saves the fee but costs hours, attention and sometimes peace.

The big idea. Management is never free: you pay a manager in dollars or yourself in hours. A **property manager** markets vacancies, shows units, screens applicants, signs leases, collects rent, handles late notices and evictions, arranges maintenance and emergencies, inspects the property, keeps the books and sends an **owner statement** each month, and keeps up with landlord–tenant and fair housing law. Fees vary by place and firm; common structures, as examples, are a **management fee** of about 8–12% of rent collected, a **leasing fee** of half to a full month's rent for each new tenant, a **renewal fee**, and sometimes a **maintenance markup** or fees for inspections, evictions or setup. Read every fee in the agreement, add them up for a year and compare the total with the value of your own time and skill — honestly, including the calls at 2 a.m.

Add up a manager's real cost. In this example, a house rents for $1,800 a month (GSI $21,600) with 5% vacancy, so collected rent is $\$21{,}600 \times 0.95 = \$20{,}520$. A 9%

management fee costs $\$20{,}520 \times 0.09 = \$1{,}846.80$. A leasing fee of half a month's rent, $900, with a new tenant every 2.5 years on average, costs $\$900 \div 2.5 = \$360$ a year. A $150 renewal fee in the other years averages about $90 a year. A 10% markup on $2,000 of repairs adds $200. The total is $2,496.80 a year, 11.6% of GSI — noticeably more than the headline 9%. Now estimate self-management: about 4 hours a month of calls, rent, repairs and bookkeeping (48 hours) plus 20 hours per turnover every 2.5 years (8 hours a year), 56 hours in all. Managing yourself "earns" $\$2{,}496.80 \div 56 \approx \$44.59$ an hour in this example — worth it for some owners and not for others.

Self-management makes the most sense when the owner lives near the property, owns only a few units, has time and a steady temperament, knows the local landlord–tenant law and is willing to learn screening, bookkeeping and maintenance. Hiring makes sense when the owner lives far away, owns many units, has a demanding job or family duties, or knows he will avoid hard conversations. A middle path is a leasing-only service or a part-time helper for showings and repairs. Either way, the owner remains responsible: a manager's fair housing violation or lost deposit can become the owner's problem, so choose carefully. Interview at least three managers. Ask how many doors each manager handles, how they screen (ask for the written criteria), how fast they answer repair calls, how they handle late rent, what their average vacancy and tenancy length are, and for sample owner statements and references from current owners. Verify the license on your state's licensing agency website.

Read the **management agreement** line by line before signing. Look for the term and how either side may end it (a long term with a heavy cancellation fee is a red flag); every fee, listed; the **repair authorization limit**, such as owner approval for repairs over $500 except emergencies; disclosure of any maintenance markups or work done by the manager's own company; how rents and deposits are held (in a trust account, never commingled) and when the owner is paid; the reserve the manager keeps; what reports the owner receives and when; who decides screening criteria and how fair housing compliance is ensured; how evictions are handled and paid for; insurance the manager carries; and what happens to tenants, deposits and records if the agreement ends. Red flags include fees not stated in writing, unlimited authority to spend the owner's money, vague reporting and any reluctance to show a license or references.

Run the numbers. The Rental worksheet's management line is a percentage of collected rent, and its default of 9% is there even if you plan to self-manage, because your time is worth something and because you may need to hire a manager later — a move, a new job or a growing family changes everything. To reflect a full fee schedule, enter the management percentage and add leasing, renewal and markup costs to other expenses (in this example about $650 a year, or $54 a month). Compare the cash flow with and without a manager; if a deal only works when you manage it yourself for free, it is a thin deal. The classic mistakes: comparing managers by the headline percentage alone; setting management to 0% because "I'll do it myself"; signing an agreement with no repair limit or a punishing termination fee; never verifying the manager's license; and assuming that hiring a manager removes the owner's legal responsibility.

PICTURE STUDY



The Account Keeper, Nicolaes Maes, 1656 · Oil on canvas · Saint Louis Art Museum; public domain

Image: Wikimedia Commons, public domain

Nicolaes Maes, a pupil of Rembrandt, painted gentle scenes of Dutch household life in the 1650s, often with a hint of humor. Here a woman responsible for a household's accounts has fallen asleep over her ledger, pen still in hand, with the keys of the house hanging behind her. She is a picture of the faithful manager worn out by the work. The painting opens this lesson because managing property means keeping the accounts, the keys and the promises — and an owner must decide honestly who has the time and strength to do it well.

Look closely

- Find the ring of keys on the wall. Whoever holds the keys holds the trust of the household — as a property manager does today.
- Look at the open ledger and the coins. Rents and deposits are other people's money and must be counted exactly.
- Notice that she has fallen asleep at her work. Self-management can wear an owner down; tiredness is a real cost.
- See the great world map above her. Managing at a distance is hard; a far-away owner needs someone trustworthy close by.

Talk about it

1. What does this picture suggest about the hidden cost of managing your own property?
2. If you hired someone to keep the keys and the accounts of your rental, what would you check before trusting them?
3. First Corinthians 4:2 says that “it is required in stewards, that a man be found faithful.” How does that standard apply both to a hired manager and to an owner who manages his own rentals?

PROJECT

Hire or Self-Manage? The Manager Comparison

You will compare the published fees and services of property managers in your area, read a sample management agreement and decide — with numbers — whether you would self-manage or hire for a property in your deal binder. Research only; contact a manager only with a parent present and permission.

You will need

- The websites of three local property management firms (published fee pages, where available)
- A sample property management agreement from a professional or state source
- Your state real estate licensing agency's license-lookup page
- The Deal Analyzer's Rental worksheet for one property in your deal binder

Steps

1. From your state licensing agency, write whether managing rentals for others requires a license in your state and which kind, with the source and date.
2. For three local managers, record the management fee, leasing fee, renewal fee, any markups or other fees and the services listed. Verify each firm's license on the state site.
3. For your deal-binder property, compute each manager's total annual cost and its percentage of GSI, as in the worked example.
4. Estimate your own self-management hours for a year and compute the value per hour.
5. Read the sample agreement and mark each clause acceptable or a red flag, writing what you would change.
6. Run the Rental worksheet twice: management at the best manager's full cost (percentage plus other fees in other expenses), and management at 0%. Record both cash flows.

7. Write a one-paragraph decision — self-manage or hire, and which manager — and file it with the worksheets and fee table in your deal binder.

INVESTOR'S NOTEBOOK

1. Make flashcards for every key term, plus a card listing the common manager fees.
2. Draw a table comparing self-management and hiring a manager on cost, time, distance, skill, stress and legal risk.
3. Write a trap list titled "Management," including "The headline fee is not the whole fee," "Never 0% management in the worksheet" and "Hiring a manager does not hire away your responsibility."

KEY FORMULAS

$$\text{Management fee} = \text{collected rent} \times \text{management } \% \qquad \text{Collected rent} = \text{GSI} \times (1 - \text{vacancy})$$

$$\text{Annual leasing cost} = \frac{\text{leasing fee}}{\text{average tenancy (years)}}$$

$$\text{Total manager cost} = \text{management fee} + \text{leasing} + \text{renewals} + \text{markups} + \text{other fees}$$

$$\text{Value of self-management per hour} = \frac{\text{total manager cost}}{\text{hours of self-management per year}}$$

From history. Professional estate management is old. In thirteenth-century England, manuals such as *Walter of Henley's Husbandry* and the anonymous *Seneschaucy* described the duties of a lord's steward, bailiff and reeve: who should oversee the lands, how the accounts should be kept and how auditors should check them each year. The tools have changed from parchment rolls to owner statements, but the principle — someone trustworthy keeps the property and the accounts, and someone checks them — has not.

WORKED EXAMPLES

Example 1. In this example, rent is $1,800 a month with 5% vacancy. A manager charges 9% of collected rent, a leasing fee of half a month's rent per new tenant (average tenancy 2.5 years), a $150 renewal fee (about $90 a year on average) and a 10% markup on about $2,000 a year of repairs. Find the total annual cost and its share of GSI.

Show solution

1. Collected rent: $\$1{,}800 \times 12 \times 0.95 = \$20{,}520$; management fee $\$20{,}520 \times 0.09 = \$1{,}846.80$.
2. Leasing: $\$900 \div 2.5 = \$360$; renewals about $90; markup $0.10 \times \$2{,}000 = \$200$.
3. Total: $\$1{,}846.80 + \$360 + \$90 + \$200 = \$2{,}496.80$.
4. Share of GSI: $\$2{,}496.80 \div \$21{,}600 = 11.6\%$.

Answer: $2,496.80 a year, about 11.6% of GSI — higher than the 9% headline fee.

Example 2. In this example, self-managing the same house takes about 4 hours a month plus 20 hours per turnover, with a turnover every 2.5 years. What is self-management worth per hour?

Show solution

1. Monthly work: $4 \times 12 = 48$ hours a year.
2. Turnovers: $20 \div 2.5 = 8$ hours a year; total 56 hours.
3. Value per hour: $\$2{,}496.80 \div 56 = \$44.59$.
4. Compare with what the owner earns or values per hour, and add the hours of stress and availability that a spreadsheet cannot see.

Answer: About $44.59 an hour. An owner who lives nearby and enjoys the work may keep it; a busy or distant owner may hire.

Example 3. Review five clauses from a sample management agreement and mark each acceptable or a red flag: (1) “Term: one year; either party may cancel with 30 days’ written notice.” (2) “Manager may make any repairs it deems necessary without owner approval.” (3) “Security deposits will be held in Manager’s trust account as state law requires.” (4) “Manager may add a markup to vendor invoices.” (5) “Owner will receive a monthly statement of income and expenses.”

Show solution

1. (1) Acceptable — a reasonable term with a fair way out.
2. (2) Red flag — there is no repair authorization limit; ask for owner approval above a set amount except emergencies.
3. (3) Acceptable — trust accounts keep tenants’ and owners’ money separate, as license laws commonly require.
4. (4) Red flag as written — the markup percentage must be stated; (5) acceptable and essential.

Answer: Clauses 1, 3 and 5 are acceptable; 2 and 4 must be rewritten — a repair limit and a stated markup — before signing.

PRACTICE

1. Easy Name six services a property manager commonly provides.

   Show answer

   Any six of: marketing and showing vacancies, screening applicants, signing leases, collecting rent, handling late notices and evictions, arranging repairs and emergencies, inspections, bookkeeping and owner statements, and legal compliance.

2. Easy What is commingling, and why is it forbidden?

   Show answer

   Mixing clients’ or tenants’ money with the manager’s own funds. It puts other people’s money at risk and makes theft or loss easy to hide, so license laws and professional codes require separate trust accounts.

3. Easy Why does the Rental worksheet include a management percentage even for owners who plan to self-manage?

Show answer

The owner's time has value, and circumstances can force hiring a manager later. A deal that works only with free management is a thin deal.

4. Medium In this example, rent is $2,000 a month with 6% vacancy, and the manager charges 10% of collected rent. What is the annual management fee?

Show answer

Collected rent $\$24{,}000 \times 0.94 = \$22{,}560$; fee $\$22{,}560 \times 0.10 = \$2{,}256$.

5. Medium In this example, a leasing fee is a full month's rent of $1,500, and tenants stay 3 years on average. What does leasing cost per year?

Show answer

$\$1{,}500 \div 3 = \$500$ a year.

6. Medium In this example, self-management takes 60 hours a year and a manager would cost $2,700. What is self-management worth per hour?

Show answer

$\$2{,}700 \div 60 = \$45$ an hour.

7. Medium Name three red flags in a management agreement.

Show answer

Any three of: no repair authorization limit; fees or markups not stated in writing; a long term with a heavy cancellation fee; deposits not held in a trust account; vague or infrequent owner reporting; no license or references offered.

8. Hard Manager A charges 8% plus a full month's rent to lease; Manager B charges 10% with no leasing fee. Rent is $1,600 with 5% vacancy, and tenants stay 2 years on average. Which costs less per year?

Show answer

Collected rent $18,240. A: $\$1{,}459.20 + \$1{,}600 \div 2 = \$2{,}259.20$. B: $1,824. B costs less despite the higher percentage.

9. Hard A manager you hired refused to rent to a family with children. Who may be liable, and what should you have done beforehand?

Show answer

Both the manager and the owner may be liable under fair housing law. Beforehand, the owner should have reviewed the manager's written screening criteria and fair housing practices and put compliance requirements in the agreement.

10. Hard An investor lives three hours from a duplex. Give two reasons to hire a manager and one reason to self-manage anyway.

Show answer

Reasons to hire: emergencies and showings need someone nearby, and inspections and repairs are hard to oversee from a distance. A reason to self-manage: a reliable local handyman and online systems might handle most tasks, if the owner has time and knows the state's law.

11. Challenge In this example, a rental's cash flow is $180 a month with management at 0%. A manager would cost $2,496.80 a year. What is the cash flow with the manager, and what does that tell you about the deal?

Show answer

$\$180 - \$2{,}496.80 \div 12 = \$180 - \$208.07 = -\$28.07$ a month. The deal only works if the owner works for free, so it is thin and fragile.

12. Challenge Write three sentences explaining to a parent whether you would self-manage your first rental, and why.

Show answer

A strong answer weighs the numbers (the manager's full cost and the value per hour of self-management), the owner's distance, time and skills, and the learning value of managing a first property, and names a point — such as moving away or owning more units — at which the decision would change.

COMMON MISTAKES

- Comparing managers by the headline percentage only. Add leasing, renewal, markup and other fees for a full year.
- Setting management to 0% in the Rental worksheet. Your time has value, and you may need to hire later.

- Signing an agreement without a repair authorization limit. Require approval above a stated amount except emergencies.
- Never verifying the manager's license. Check your state licensing agency's website before signing.
- Assuming a manager takes over the owner's legal responsibility. Owners can still be liable for fair housing and deposit violations.
- Self-managing without learning the law. Screening, deposits, notices and repairs all follow state rules.

Make it a game · Hire or Handle. Make owner cards ("lives next door, retired," "lives 300 miles away," "new parent with a demanding job," "owns 12 units," "owns one house and loves fixing things") and event cards ("2 a.m. leak," "vacancy in December," "late rent," "deposit dispute," "annual inspection"). Draw one owner card; then flip five event cards. For each event, players decide whether that owner should handle it or a manager should, and estimate the hours or dollars. After five events, the table decides: hire or handle? Swap owners and play again.

Scripture. "Moreover it is required in stewards, that a man be found faithful." (1 Corinthians 4:2, KJV)

Paul names the one quality a steward must have: faithfulness. A hired manager is a steward of the owner's property and the tenants' money; an owner who self-manages is a steward of both before God. Whichever you choose, the test is the same — be found faithful.

UNIT 8

Landlording and Property Management

Buying a rental is a single day; being a landlord is every day after it. A rented house is someone's home, and the landlord's work is to keep that home safe, fair and well run while the numbers stay honest. In this unit you will learn landlording as service. You will study the **Fair Housing Act** and its seven federal **protected classes** as settled law, write **screening criteria** before you advertise and apply them the same way to every applicant, and learn the **adverse action notice** a screening report requires. You will read and annotate a **lease**, follow your state's rules for the **security deposit**, and carry out a careful move-in.

Then you will plan the work that keeps a home livable: the **implied warranty of habitability**, a preventive calendar, the true cost of a **turnover** and a **CapEx reserve** built from a component table. You will design a rent collection system that is kind and firm, practice the hard conversation about late rent and learn the lawful **eviction** process — notice, court, judgment and sheriff — as a rare last resort, never self-help. Finally, you will weigh managing your own property against hiring a **property manager**, with every fee counted and your own time valued honestly.

PREREQUISITES

- Can build a full Rental worksheet analysis, including vacancy, repairs, CapEx and management percentages (Unit 3)
- Can explain why landlord–tenant law differs by state and find your state's official landlord–tenant sources (Lesson 2.5)
- Can estimate market rent from rent comparables and describe a rental listing accurately (Lesson 2.3)
- Has a deal binder with analyzed rentals to which this unit's policies and documents can be attached

MASTERY CHECKLIST

- ☐ I can name the seven federal protected classes, find the added classes in my state and city and write a rental ad that describes the property, not the people wanted.
- ☐ I can write screening criteria, apply them identically to several applicants in the order received and document each decision, including an FCRA adverse action notice.
- ☐ I can respond lawfully to a reasonable accommodation request such as an assistance animal.
- ☐ I can annotate a lease against my state's statute, compute prorated rent and settle a security deposit with an itemized statement that separates damage from normal wear and tear.
- ☐ I can build a preventive maintenance calendar, a component-based CapEx reserve and a turnover cost estimate, and set the Rental worksheet's repairs and CapEx percentages from them.
- ☐ I can tell a repair from a capital improvement using the betterment, restoration and adaptation tests.
- ☐ I can describe the lawful eviction process in order, explain why self-help and retaliation are illegal, and compute the cost of nonpayment

and its effect on vacancy and reserves.

- ☐ I can compute a property manager's full annual cost, value my own management time and read a management agreement for red flags.

OPTIONAL BOOKS AND RESOURCES FOR THIS UNIT

- **School Launch Deal Analyzer**: Free. The Rental worksheet's vacancy, repairs, CapEx and management inputs carry every lesson in this unit; rerun your deal-binder properties with the honest numbers you build here. Ages 14 and up.
- **HUD: Fair Housing Rights and Obligations**: Free, official. The U.S. Department of Housing and Urban Development's explanation of what the Fair Housing Act requires of housing providers. Read with Lesson 8.1, then find your own state civil rights agency's housing page. Ages 14 and up.
- **EPA: Real Estate Disclosures about Potential Lead Hazards**: Free, official. What landlords of pre-1978 housing must disclose before a lease, with the pamphlet and sample forms. Use it in the Lesson 8.2 project. Ages 14 and up.
- **CFPB: List of consumer reporting companies**: Free, official. The Consumer Financial Protection Bureau's list of consumer reporting companies, including tenant screening companies, with how consumers can request their reports. Use it with Lesson 8.1 to understand what an adverse action notice points an applicant to. Ages 15 and up.
- ***The Book on Managing Rental Properties* by Brandon and Heather Turner (BiggerPockets Publishing)**: A practical guide to screening, leases, maintenance, rent collection and systems for small landlords. Read alongside the whole unit, and check every legal point against your own state's official sources. Ages 15 and up.

Not required. Every project in this unit works without them. School Launch has no ties to these authors, publishers or companies.

LESSONS IN THIS UNIT

8.1 Fair Housing and Tenant Screening

3 sessions of 50 minutes

8.2	**Leases, Deposits and Move-In**	3 sessions of 50 minutes
8.3	**Maintenance, Turnovers and Capital Projects**	3 sessions of 50 minutes
8.4	**Rent Collection, Hard Conversations and Eviction as a Last Resort**	3 sessions of 50 minutes
8.5	**Self-Manage or Hire a Manager**	3 sessions of 50 minutes

Unit 8 test

Closed notes, basic calculator only. Twenty four-choice questions, 5 points each, 100 points total. Allow about two minutes per question — set a timer for 40 minutes. Show the arithmetic for every calculation question on scratch paper, and choose the one best answer. Aim for 80% or better, and rework every miss in your notebook. Figures marked “in this example” are examples; real rents, fees, deadlines and rules vary by state, city and year.

1. **5 pts**

   Which of the following is NOT one of the seven federal protected classes under the Fair Housing Act?

   A. Familial status

   B. Disability

   C. Source of income

   D. National origin

2. **5 pts**

   Which rental ad wording is lawful?

   A. “Perfect for a young professional couple”

   B. “Two-bedroom apartment, $1,400, no smoking, pets considered”

   C. “Ideal for singles; no children”

   D. “Christian household preferred”

3. 5 pts

In this example, rent is $1,500 and the written criterion is gross monthly income of at least 3 times the rent. An applicant earns $4,350 a month. Does the applicant meet the criterion?

A. Yes, with $150 to spare

B. Yes, because the ratio is 3.0

C. No, because the minimum is $5,000

D. No, because the minimum is $4,500

4. 5 pts

Based partly on a tenant screening report, a landlord requires an applicant to provide a co-signer that other applicants were not required to provide. The landlord must:

A. Give the applicant an FCRA adverse action notice

B. Do nothing, because the applicant was not denied

C. Refund the application fee

D. Report the applicant to HUD

5. 5 pts

A tenant with a disability is approved to keep an assistance animal in a no-pets building as a reasonable accommodation. The landlord may:

A. Charge the usual $300 pet deposit

B. Charge monthly pet rent

C. Charge the tenant for actual damage the animal causes, but no pet fee

D. Require the tenant to move to a ground-floor unit

6. 5 pts

In this example, a tenant’s deposit is $1,600. At move-out there is $300 of unpaid rent, $250 of damage beyond normal wear and $400 of ordinary paint fading. How much must be refunded?

A. $650

B. $1,050

C. $1,300

D. $1,600

7. 5 pts

In this example, a tenant moves in on the 21st of a 30-day month at $1,500 rent. Using the days-in-month method, what is the prorated rent?

A. $450

B. $1,050

C. $500

D. $550

8. 5 pts

A landlord is leasing a house built in 1975 on a 12-month lease. Under federal law the landlord must:

A. Test the house for lead before leasing

B. Do nothing, because only pre-1960 homes are covered

C. Remove all lead paint before leasing

D. Give the EPA pamphlet, disclose any known lead-based paint and keep the signed disclosure three years

9. 5 pts

In the Rental worksheet, a tenant's $1,800 security deposit should be treated as:

A. Neither income nor cash invested, because it belongs to the tenant

B. Other income in the first year

C. Part of the down payment

D. A reduction of operating expenses

10. 5 pts

Javins v. First National Realty Corp. (1970) is known for holding that:

A. Landlords may evict without a court order

B. A warranty of habitability is implied in urban residential leases

C. Security deposits must earn interest

D. Tenants may never withhold rent

11. 5 pts

In this example, a roof costs $10,800 to replace and lasts 20 years. What monthly CapEx reserve does it need?

A. $540

B. $90

C. $45

D. $27

12. 5 pts

Which work is a capital improvement rather than a repair?

A. Patching a small roof leak

B. Replacing a broken window latch

C. Fixing a dripping faucet

D. Replacing the entire roof

13. 5 pts

In this example, each turnover costs $3,600 and tenants stay 3 years on average. What is the annual turnover cost?

A. $1,200

B. $3,600

C. $10,800

D. $300

14. 5 pts

A tenant is two months behind on rent. Which action is lawful?

A. Changing the locks while the tenant is away

B. Shutting off the water until the rent is paid

C. Removing the tenant’s belongings to the curb

D. Serving the notice state law requires and, if necessary, filing an eviction in court

15. 5 pts

What is the correct order of a lawful eviction?

A. Notice, filing, service, hearing, judgment, writ enforced by a sheriff or marshal

B. Filing, notice, judgment, hearing, writ, service

C. Lockout, notice, hearing, judgment

D. Hearing, notice, filing, writ, judgment

16. 5 pts

A tenant reports code violations to the city, and the landlord responds by filing to evict. This is most likely:

A. A cure-or-quit notice

B. Retaliation, which is illegal in most states

C. A lawful no-cause termination in every state

D. Cash for keys

17. 5 pts

In this example, rent is $2,000 a month with 5% vacancy, and a manager charges 8% of collected rent. What is the annual management fee?

A. $1,920

B. $1,600

C. $1,824

D. $2,280

18. 5 pts

Which management agreement clause is the clearest red flag?

A. “Either party may cancel with 30 days’ notice.”

B. “Deposits are held in Manager’s trust account.”

C. “Owner receives a monthly statement.”

D. “Manager may make any repair it chooses without owner approval.”

19. 5 pts

In many states, a person who manages rental property for other owners for pay must:

A. Hold a real estate license or a property-management license, as state law requires

B. Hold a general contractor’s license

C. Be a certified public accountant

D. Register with HUD

20. 5 pts

A reliable tenant of four years loses her job and is one month behind, but has a new job starting soon. The best first response is to:

A. Serve an eviction notice the same day without speaking to her

B. Talk with her, consider a written payment plan offered under the same policy as for any tenant, and point her to local help

C. Forgive the rent informally and say nothing more

D. Raise her rent to cover the risk

ANSWER KEY

1. C. Source of income is protected by some states and cities, not by the federal act. The federal classes are race, color, religion, national origin, sex, familial status and disability.
2. B. It describes the property, rent and policies. A, C and D state preferences about familial status or religion, which the advertising rule forbids.
3. D. $\$1{,}500 \times 3 = \$4{,}500$, and $\$4{,}350$ is $\$150$ short. The same rule must be applied to every applicant.
4. A. Requiring a co-signer because of a consumer report is adverse action under the FCRA, even though the application was not denied — the tempting wrong answer B.
5. C. Pet fees and pet rent may not be charged for an approved assistance animal, but the tenant remains responsible for actual damage. D would impose a different term because of the disability.
6. B. $\$1{,}600 - \$300 - \$250 = \$1{,}050$. Ordinary fading is normal wear and tear and may not be deducted; A wrongly deducts it.
7. C. The 21st through the 30th is $30 - 21 + 1 = 10$ days, and $10 \times (\$1{,}500 \div 30) = 10 \times \$50 = \$500$. D counts 11 days; B is the rent for the days not occupied.
8. D. Housing built before 1978 is covered. The rule requires disclosure of what is known and the pamphlet — not testing or removal, the tempting answers A and C.
9. A. A security deposit is a liability held for the tenant and must be returned, less lawful deductions.
10. B. The court held that leases of urban dwellings carry an implied warranty of habitability measured by the housing code, a rule nearly every state now follows.
11. C. $\$10{,}800 \div 20 = \$540$ a year; $\$540 \div 12 = \$45$ a month. A is the annual figure.
12. D. Replacing a major component restores the property and is generally depreciated. A, B and C keep the property in ordinary working condition.
13. A. $\$3{,}600 \div 3 = \$1{,}200$ a year. Longer tenancies lower this number, which is why keeping good tenants pays.
14. D. A, B and C are self-help eviction, illegal in nearly every state and a source of damages against the landlord.

15. A. The landlord gives proper notice first, then files, serves, attends the hearing, obtains a judgment and, if needed, has a sheriff or marshal enforce the writ.
16. B. Punishing a tenant for complaining to authorities is retaliation. C is wrong because many states presume retaliation when an eviction follows a complaint.
17. C. Collected rent $\$24{,}000 \times 0.95 = \$22{,}800$; fee $\$22{,}800 \times 0.08 = \$1{,}824$. A charges the fee on scheduled rent, not collected rent.
18. D. With no repair authorization limit, the manager can spend the owner's money without restraint. A, B and C are sound terms.
19. A. Managing for others is a licensed real estate activity in many states, with trust-account rules; a few states exempt it, so check your state. An owner managing his own property generally needs no license.
20. B. Kindness and firmness together: a conversation, a written plan and resources usually cost far less than an eviction. C leaves no record and is not offered consistently to others.

PORTFOLIO PIECE: DEAL BINDER — LANDLORDING AND PROPERTY MANAGEMENT

Add this unit's landlord's handbook to your deal binder: the list of protected classes for your state and city, a lawful ad, written screening criteria, five sample screening decisions and a sample adverse action notice (8.1); an annotated lease, your state's deposit and disclosure rules, a move-in condition report and a proration (8.2); a twelve-month preventive calendar, a component CapEx table, a turnover estimate and the reworked Rental worksheet (8.3); a rent collection policy, your state's eviction steps from official sources, a conversation script, a payment plan and an eviction cost sheet (8.4); and a manager comparison, a marked-up management agreement and a hire-or-self-manage decision (8.5).

Every state rule must cite the official source and the date you checked it. Together these documents form the operating manual you would actually use on the day you become a landlord.

LOOK FOR	WHAT IT MEANS
Fair housing and screening	The ad describes only the property and terms, the criteria are written before advertising and applied identically in order, every decision is documented and the adverse action notice is complete.
Lease, deposit and move-in	Every lease clause is marked with a cited state source, the deposit rules and disclosures are correct for the state and the condition report and proration are accurate.
Maintenance and CapEx	The preventive calendar fits the climate, the CapEx table converts correctly to a monthly reserve and percentage, and the Rental worksheet is rerun with evidence-based inputs.
Rent collection and eviction	The policy is consistent and lawful, the eviction steps match official state sources, no self-help appears anywhere and the cost sheet's arithmetic is correct.
Management decision	All manager fees are totaled for a year, self-management time is valued honestly, red flags are identified and the decision follows from the numbers and the owner's situation.
Service and honesty	Throughout, tenants are treated as neighbors to be served fairly, promises in writing match practice, and every legal statement is sourced rather than guessed.

UNIT 9

Taxes, Insurance and Protection

Picture the day you sell a rental you have owned for ten years. The buyer's check looks enormous — until you subtract the loan, the commissions and a tax bill built partly from deductions you took years ago. Or picture the night a pipe bursts, or a guest falls on the stairs. This unit is about the parts of real estate investing that do not show up in a listing: the tax code, the insurance policy and the records that hold everything together. You will learn how **depreciation** lets a cash-flowing rental show a loss on **Schedule E**, why land is never depreciated, and how to tell a **repair** from a **capital improvement**. You will follow a sale from **amount realized** to **adjusted basis** to gain, see why depreciation comes back as **unrecaptured Section 1250 gain**, and learn exactly what the **Section 121** home-sale exclusion does — and does not do — for a house hacker.

Then you will trace a **1031 exchange** on a calendar, with its 45-day and 180-day deadlines and the **boot** that makes part of the gain taxable; insure a rental for what it costs to rebuild; layer an **umbrella** policy over a **landlord policy**; and weigh honestly what a **limited liability company** can and cannot protect. You will finish by keeping a landlord's books for three months. Taxes are taught here as education, not advice: every rule is checked against IRS publications, current rates are left to the current year's instructions, and real decisions belong with a CPA, an insurance agent and an attorney.

PREREQUISITES

- Can complete a Rental worksheet in the Deal Analyzer and explain NOI, debt service, cash flow and the CapEx reserve (Unit 3)
- Can find a property's assessed land and improvement values on a county assessor's website (Unit 2)
- Can read an amortization table and split a mortgage payment into interest and principal (Unit 4)
- Has a deal binder with at least ten analyzed properties, including one house hack (Unit 5)

MASTERY CHECKLIST

- ☐ I can allocate a rental's basis between land and building and compute full-year and first-year depreciation over 27.5 years.
- ☐ I can classify spending as a repair or a capital improvement using the betterment, restoration and adaptation tests.
- ☐ I can compute a rental's taxable income and reconcile it with cash flow, and explain the passive activity rules and the $25,000 allowance in outline.
- ☐ I can compute amount realized, adjusted basis and gain on a sale, and split the gain into unrecaptured Section 1250 gain and long-term capital gain.
- ☐ I can apply the Section 121 ownership, use and look-back tests, including to a duplex house hack and a former home that became a rental.
- ☐ I can lay out a 1031 exchange calendar and compute boot, recognized gain, deferred gain and replacement basis.
- ☐ I can choose dwelling and loss-of-rents coverage amounts, explain umbrella layering and state what an LLC can and cannot protect.

- ☐ I can keep a landlord's ledger and rent roll, prepare a monthly owner statement and compare a year's actual results with the pro forma.

OPTIONAL BOOKS AND RESOURCES FOR THIS UNIT

- **School Launch Deal Analyzer**: Free. The Rental worksheet gives the cash view of every property in this unit; you build the tax view beside it, update the Insurance input with real landlord quotes and use the stress test's taxes-and-insurance row. Ages 14 and up.
- **IRS Publication 527, Residential Rental Property**: Free, official. The IRS's own guide to rental income, expenses, repairs versus improvements, depreciation (with Table 2-2d) and the passive activity rules. Use it with Lessons 9.1 and 9.5, and check the current year's edition. Ages 15 and up.
- **IRS Publication 544, Sales and Other Dispositions of Assets**: Free, official. Explains gain, adjusted basis, depreciation recapture and like-kind exchanges, including the 45- and 180-day rules and boot. Read the like-kind exchange section with Lesson 9.3; pair it with Publication 523, Selling Your Home, for Lesson 9.2. Ages 15 and up.
- **FloodSmart (National Flood Insurance Program)**: Free, official. FEMA's consumer site for flood insurance: what standard policies leave out, how flood coverage works and how to find a property's flood risk. Use it in the Lesson 9.4 project. Ages 14 and up.
- **Amanda Han and Matthew MacFarland, The Book on Tax Strategies for the Savvy Real Estate Investor (BiggerPockets Publishing)**: Optional book by two CPAs who invest in real estate. A readable tour of depreciation, exchanges and record-keeping for small investors; read it alongside the IRS publications, because tax law changes after any book is printed. Ages 16 and up.

Not required. Every project in this unit works without them. School Launch has no ties to these authors, publishers or companies.

LESSONS IN THIS UNIT

9.1 Depreciation and the Rental Tax Return — 3 sessions of 50 minutes

9.2 Selling: Capital Gains, Recapture and the Home-Sale Exclusion

3 sessions of 50 minutes

9.3	**The 1031 Exchange**	3 sessions of 50 minutes
9.4	**Insurance, Umbrellas and LLCs**	3 sessions of 50 minutes
9.5	**Bookkeeping for Landlords**	3 sessions of 50 minutes

Unit 9 test

Closed notes; a basic calculator is allowed. Twenty four-choice questions, 5 points each, about two minutes per question — set a timer for 40 minutes. Show the arithmetic for every calculation question on scratch paper, choose the best answer, then check your work against the key. Aim for 80% or better, and rework every miss in your investor's notebook. Figures marked "in this example" are examples, not current rates, prices or rules.

1. **5 pts**

   In this example, a rental's total basis is $330,000, and the assessor's values put 20% in land. What is the full-year depreciation?

   A. $12,000

   B. $9,600

   C. $6,769

   D. $8,800

2. **5 pts**

   Which of these is a deductible repair rather than a capital improvement?

   A. Replacing the entire roof

   B. Adding a deck

   C. Repainting a bedroom between tenants

   D. Converting the garage into a studio

3. 5 pts

A landlord’s monthly mortgage payment is $1,600, of which $1,250 is interest and $350 principal. What may be deducted on Schedule E for the year?

A. $15,000 of interest

B. $19,200, the full payments

C. $4,200 of principal

D. Nothing; mortgage payments are personal

4. 5 pts

An owner who actively participates has a $12,000 rental loss and modified adjusted gross income of $130,000. Under the rule in Publication 527, how much of the special allowance is available?

A. $25,000

B. $0

C. $15,000

D. $10,000

5. 5 pts

In this example, a rental collects $24,000, pays $8,000 of operating expenses, $12,000 of mortgage interest and $2,500 of principal, and has $7,000 of depreciation. What is its taxable income?

A. $1,500

B. −$5,500

C. −$3,000

D. $4,000

6. 5 pts

In this example, a rental’s cost basis is $250,000, improvements total $15,000 and depreciation allowed is $50,000. It sells for $360,000 with $25,000 of selling costs. What is the gain?

A. $120,000

B. $95,000

C. $110,000

D. $145,000

7. 5 pts

Which seller meets the Section 121 ownership and use tests?

A. Owned 4 years, rented it out the whole time, never lived there

B. Owned and lived there 20 months, sold for no special reason

C. Lived there 3 years as a tenant, then bought it and sold 6 months later

D. Owned 5 years, lived there the first 3, rented it 2, then sold

8. 5 pts

A couple lived in one unit of a duplex and rented the other, then sold after 3 years. Which part of the gain can generally be excluded under Section 121?

A. All of it, because they lived on the property

B. The gain on their own unit only

C. None of it, because the building had a rental

D. Only the depreciation on the rented unit

9. 5 pts

In this example, a rental sells at a $140,000 gain after $45,000 of straight-line depreciation. How is the gain divided?

A. $45,000 unrecaptured Section 1250 gain and $95,000 long-term capital gain

B. $140,000 long-term capital gain

C. $95,000 unrecaptured Section 1250 gain and $45,000 long-term capital gain

D. $140,000 ordinary income

10. 5 pts

A homeowner rented out her basement for several years and claimed depreciation on it. When she sells and qualifies for Section 121, what happens to that depreciation?

A. It is excluded with the rest of the gain

B. It increases her basis

C. It cannot be excluded and is taxed

D. It is ignored because the basement was inside the home

11. 5 pts

A rental sale closes October 20, 2026, starting a 1031 exchange. Day 180 is April 18, 2027, and the owner's tax return for 2026 is due April 15, 2027. She does not extend the return. When must she receive the replacement property?

A. April 18, 2027

B. December 4, 2026

C. October 20, 2027

D. April 15, 2027

12. 5 pts

In an exchange with $200,000 of realized gain, the investor receives $30,000 of cash at closing and no other boot. How much gain is recognized?

A. $0

B. $30,000

C. $170,000

D. $200,000

13. 5 pts

Which property cannot be exchanged under Section 1031?

A. A house bought, renovated and resold within six months as a flip

B. A rental house traded for a vacant lot held for investment

C. A duplex traded for a small office building

D. A farm traded for a city fourplex

14. 5 pts

In this example, a replacement property costs $500,000 and the deferred gain is $180,000. What is its basis?

A. $500,000

B. $680,000

C. $320,000

D. $180,000

15. 5 pts

Why do 1031 investors use a qualified intermediary?

A. To find replacement properties for them

B. To guarantee the replacement will rise in value

C. To file their tax return

D. So that they never actually or constructively receive the sale proceeds

16. 5 pts

A family moves out of its house and rents it to a tenant but keeps its homeowner's policy. What is the main problem?

A. Homeowner's policies cost more than landlord policies

B. A homeowner's policy is written for an owner-occupied home and may not properly cover a tenant-occupied rental

C. Landlord policies cover the tenant's furniture, so the tenant is unprotected

D. There is no problem if the mortgage is paid

17. 5 pts

What should set the dwelling coverage limit on a rental house?

A. The purchase price

B. The assessed value

C. The estimated cost to rebuild the building

D. The loan balance

18. 5 pts

A landlord owns a rental in a properly run LLC and personally repairs a stair railing badly; a guest is injured. What protection does the LLC give her personally?

A. Little or none for her own negligence

B. Complete protection, because the LLC owns the property

C. Complete protection if she has an umbrella in the LLC's name

D. It transfers the claim to the lender

19. 5 pts

A new tenant pays a $1,900 security deposit that the landlord expects to return at the end of the lease. How is it recorded?

A. As rent income this month

B. As a repair reserve

C. As a capital improvement

D. As money held for the tenant, not income

20. 5 pts

In this example, a pro forma projected repairs at 6% of a $30,000 gross scheduled income. Actual repairs were $2,550. What is the variance?

A. $1,800 over budget

B. $750 over budget

C. $750 under budget

D. $2,550 over budget

ANSWER KEY

1. B. Building basis = $330,000 × 0.80 = $264,000; $264,000 ÷ 27.5 = $9,600. Choice A depreciates the land too ($330,000 ÷ 27.5); choice C uses the 39-year nonresidential period.
2. C. Repainting between tenants keeps the property in ordinary condition. A new roof is a restoration, a deck is a betterment and a garage conversion is an adaptation — all capitalized and depreciated.
3. A. Only interest is a rental expense: $1,250 × 12 = $15,000. Principal repays the loan and is never an expense, so the full $19,200 is wrong.
4. D. The $25,000 allowance is reduced by half of the MAGI over $100,000: $25,000 − 0.5 × $30,000 = $10,000. So $10,000 of the $12,000 loss may offset other income; the rest carries forward. Zero applies only at $150,000 or more.
5. C. $24,000 − $8,000 − $12,000 − $7,000 = −$3,000. Choice A is the cash flow ($24,000 − $8,000 − $12,000 − $2,500); choice D forgets depreciation.
6. A. Adjusted basis = $250,000 + $15,000 − $50,000 = $215,000; amount realized = $360,000 − $25,000 = $335,000; gain = $120,000. Choice D forgets the selling costs; choice C ignores improvements, depreciation and costs.
7. D. She owned it at least 24 months and lived in it 36 months within the 5 years before the sale, and the rental time after she moved out is not nonqualified use. Choice C fails the ownership test; B falls short of 24 months.
8. B. Publication 523 treats the rented unit of a duplex as space separate from the home, so only the gain on the owners' unit qualifies. Depreciation is never excluded.
9. A. The part of the gain equal to the depreciation is unrecaptured Section 1250 gain ($45,000); the remaining $140,000 − $45,000 = $95,000 is long-term capital gain for property held more than a year.
10. C. Gain equal to depreciation allowed or allowable after May 6, 1997 cannot be excluded, even for space within the home. Being inside the living area only means the rest of the gain need not be allocated.
11. D. The exchange period ends on the earlier of day 180 or the return due date including extensions. Without an extension, April 15 comes first. December 4, 2026 is day 45, the identification deadline.
12. B. Recognized gain is the smaller of realized gain and boot: min($200,000, $30,000) = $30,000. The other $170,000 is deferred.

13. A. Real property held primarily for sale does not qualify. Any investment or business real estate is like-kind to any other, so B, C and D can qualify.
14. C. Replacement basis is cost minus deferred gain: $500,000 − $180,000 = $320,000. The deferred gain is carried into the new property through this lower basis.
15. D. If the investor receives or controls the money, the transaction becomes a taxable sale. The intermediary holds the proceeds under a written agreement.
16. B. Once the property is rented, the owner needs a dwelling (landlord) policy with loss-of-rents and premises liability coverage, and must tell the insurer. Choice C is false: a landlord policy does not cover the tenant's belongings.
17. C. Insurance pays to rebuild the structure; the land and location in the market price are not destroyed by fire. The assessed value and the loan balance have no direct connection to rebuilding cost.
18. A. An LLC can shield owners from the company's debts and claims, but not from their own negligent acts. Liability insurance and an umbrella are the first defense.
19. D. A refundable security deposit is not income when received; it is owed back to the tenant under the lease and state law. Any amount later kept for damage or unpaid rent becomes income in that year.
20. B. Projected repairs = 0.06 × $30,000 = $1,800; variance = $2,550 − $1,800 = $750 over budget, or 8.5% of GSI actual versus 6% projected. Choice A confuses the budget with the variance.

PORTFOLIO PIECE: DEAL BINDER, UNIT 9: THE TAX, INSURANCE AND RECORDS SECTION

Add a new tabbed section to your deal binder. It holds the two-column cash-view and tax-view sheet with the depreciation schedule from Lesson 9.1; the "What Would You Keep After the Sale?" summary, with its gain split and house-hack rework, from Lesson 9.2; the 45-day exchange calendar, three replacement worksheets and boot computations from Lesson 9.3; the written protection plan, flood-map note and insurance-updated Rental worksheet from Lesson 9.4; and the three-month ledger, rent roll, owner statements and pro forma comparison from Lesson 9.5.

Every page ends the way all binder pages do: with a printed worksheet where one applies and a one-paragraph verdict — buy, negotiate to a stated price, sell, hold, exchange or walk away — defended with numbers. Taxes are shown as structure and estimates labeled "in this example," never as advice.

LOOK FOR	WHAT IT MEANS
Depreciation and the tax view	Land and building are allocated with a stated method; full-year and first-year depreciation are correct; the tax view and cash view reconcile (cash flow = taxable income + depreciation − principal); repairs and improvements are classified correctly.
Sale and exclusion analysis	Amount realized, adjusted basis and gain are computed with every step shown; the gain is split into the depreciation part and the remaining long-term gain; the Section 121 tests are applied correctly, including the duplex's rented unit and the 2-of-5 window.
1031 exchange plan	The calendar shows day 45, day 180 and the return due date; the identification follows the three-property or 200% rule; boot, recognized gain, deferred gain and replacement basis are correct; the verdict judges the replacement on its own cash flow.
Protection plan	Dwelling coverage is based on rebuild cost, loss of rents is sized, flood and earthquake gaps are checked, the umbrella is explained, the LLC discussion states both its limits and the due-on-sale question, and the Rental worksheet is updated with a realistic premium.
Books and annual review	Three months of transactions are categorized by Schedule E line; principal, deposits and improvements are handled correctly; each month has an owner statement; variances against the pro forma

LOOK FOR	WHAT IT MEANS
	are computed and explained with a specific change to next year's inputs.
Honesty, clarity and verdicts	Every page is neat, dated and labeled; example figures are marked as examples; no tax rate is stated as fact; every verdict is defended with numbers and shows sound judgment, including willingness to walk away.

9.1 Depreciation and the Rental Tax Return

OBJECTIVES

- Allocate a rental's cost basis between land and building using fair market values or the assessor's ratio, and compute straight-line depreciation over 27.5 years.
- Estimate first-year depreciation with the mid-month convention and check it against Publication 527's Table 2-2d.
- Name the main Schedule E income and expense lines and classify a spending item as a deductible repair or a capital improvement using the betterment, restoration and adaptation tests.
- Compute a rental's taxable income and explain, with numbers, how a property can produce positive cash flow and a tax loss in the same year.
- Describe the passive activity rules, the $25,000 active-participation allowance and its phase-out, and cost segregation in concept — as education, not tax advice.

> **Warm-up.** A neighbor says, "My rental put $350 in my pocket last year, but my tax return says it lost $6,000. Is my accountant making a mistake?" In five minutes, list every reason you can think of that the cash a rental produces and the income it reports to the IRS could be different. Keep the list; you will check it against the lesson's worked example.

WATCH

How to calculate depreciation on residential rental real estate using IRS Form 4562

Teach Me! Personal Finance · 13:29

https://www.youtube.com/watch?v=V-1xtHYzvRM

> **WHEN TO WATCH**
> Watch after the fifth core idea with Publication 527's Table 2-2d open beside you; pause each time the presenter enters a number on Form 4562 and write the matching line of your own worked example next to it.

BACKUP VIDEO

How to Allocate Rental Purchase Prices Between Improvements and Land [Tax Smart Daily 033]

Hall CPA | Tax Smart Real Estate Investors · 9:42

https://www.youtube.com/watch?v=bLhZ0PE4I2k

A focused second pass on separating land from building; watch before the project and list each allocation method he names, then circle the one Publication 527 describes.

KEY TERMS

depreciation

A yearly deduction that recovers the cost of property used in a business or held to produce income, such as a rental building, over a recovery period set by tax law.

basis

Generally the cost of property, including certain settlement costs paid to acquire it, used to figure depreciation and gain or loss.

adjusted basis

Basis increased by capital improvements and decreased by depreciation allowed or allowable, casualty losses and certain other items.

recovery period

The number of years over which the basis of property is depreciated; 27.5 years for residential rental buildings and 39 years for nonresidential real property under the general system.

straight-line method

A depreciation method that deducts the same amount each full year of the recovery period.

mid-month convention

The rule, required for residential rental and nonresidential real property, that treats property placed in service or disposed of during any month as placed in service or disposed of at the middle of that month.

Schedule E (Form 1040)

The IRS schedule on which individuals report income and expenses from rental real estate, with one column for each property.

capital improvement

A cost that results in a betterment, a restoration or an adaptation of property; it is added to basis and depreciated rather than deducted in the year paid.

repair

A cost that keeps property in ordinary, efficient operating condition without bettering, restoring or adapting it; generally deductible in the year paid.

passive activity

A trade or business in which the taxpayer does not materially participate, and generally any rental activity; losses from it can generally offset only passive income unless an exception applies.

active participation

Owning at least 10% of a rental and making management decisions in a significant and bona fide sense; it can allow up to $25,000 of rental loss against other income, phased out as modified adjusted gross income rises from $100,000 to $150,000.

cost segregation

An engineering-based study that separates a building's cost into shorter-lived components, such as appliances, carpet and land improvements, so they can be depreciated over shorter recovery periods.

CORE IDEAS

The story. On February 3, 1913, the Sixteenth Amendment was ratified, and that October Congress passed the first income tax of the modern era. Tucked into the law was a short permission that every landlord still uses: a business could deduct a reasonable allowance for the "exhaustion, wear and tear" of its property. The idea

was fair. A frame house rented out in 1913 was slowly being used up — its shingles weathering, its stairs wearing hollow, its furnace rusting — and a landlord who spent $3,000 on the building had not truly earned a profit until that cost was recovered. But the law did not say how fast a house wore out — twenty years? forty? — and for decades the question of a building's "useful life" filled tax courts with arguments about lumber, plaster and climate.

How they figured it out. The Treasury first tried to settle the argument with tables. By the 1930s it published *Bulletin F*, a booklet of suggested useful lives for thousands of kinds of property, revised in 1942; owners could still argue for a different life if their facts supported it. In 1981 Congress gave up on case-by-case lives and wrote recovery periods directly into the law with the Accelerated Cost Recovery System, which let real estate be written off in as little as 15 years. The Tax Reform Act of 1986 swung back, setting **27.5 years** for **residential rental property** and 31.5 years for nonresidential buildings, depreciated **straight-line**; in 1993 the nonresidential period became **39 years**. That system, the Modified Accelerated Cost Recovery System (MACRS), is the one IRS Publication 527, *Residential Rental Property*, explains today.

The big idea. Depreciation lets you deduct the cost of a rental building a little at a time over its recovery period. Start with **basis** — generally what you paid, plus certain settlement costs such as title fees and recording charges. Then separate the **land**, because land never wears out and is never depreciated. Publication 527 says to divide the cost by the fair market values of land and building at purchase, and if you are not certain of them, you may use the ratio from the county's assessed values. In this example, you pay $300,000 plus $6,000 of costs added to basis, and the assessor values the land at $50,000 and the house at $200,000; the building share is 80%, so the depreciable basis is $244,800 and the yearly deduction is $244,800 ÷ 27.5 = $8,901.82. Depreciation reduces your **adjusted basis** by the amount **allowed or allowable** — even if you forget to claim it — which will matter when you sell.

The deduction is reported on **Schedule E (Form 1040)**, one column per property. Rents go on the income line, including **advance rent** in the year you receive it. A security deposit you plan to return is not income; any part you keep for damage or unpaid rent becomes income that year. The expense lines read like a landlord's checklist: advertising, auto and travel, cleaning and maintenance, commissions, insurance, legal and other professional fees, management fees, mortgage interest,

other interest, repairs, supplies, taxes, utilities, depreciation (line 18, figured on Form 4562), and other. Notice what is missing: mortgage **principal**; only the interest is an expense. Depreciation starts when the property is **placed in service** — ready and available to rent — and the **mid-month convention** treats it as placed in service in the middle of that month, so a March start earns 9.5 months of depreciation in year one.

The most important judgment on the return is **repair or improvement**. A **repair** keeps the property in ordinary working order — patching a roof leak, repainting between tenants — and is deducted the year you pay it. A **capital improvement** results in a **betterment** (fixing a pre-existing defect, enlarging, or increasing capacity or quality), a **restoration** (replacing a substantial structural part, such as the whole roof, or rebuilding to like-new) or an **adaptation** to a new use; it is added to basis and depreciated. A new roof on a rental house is depreciated over 27.5 years, while appliances, carpets and furniture used in a rental are 5-year property and fences and shrubbery 15-year property under the general system (Publication 527, Table 2-1). The IRS also offers elective safe harbors — a de minimis rule for small purchases and a routine-maintenance rule — with dollar limits that change; check the current IRS tangible-property guidance. **Cost segregation** applies the same component idea to a whole building: an engineer separates out the shorter-lived parts so more depreciation comes sooner. It costs money, and faster deductions now mean more gain taxed later.

In this example, a house collects $27,600 of rent, pays $9,284 of operating expenses and makes loan payments of $17,963 — $15,678 of interest and $2,286 of principal. Its cash flow is $353. Its taxable result is $27,600 − $9,284 − $15,678 − $8,902 of depreciation = a **loss of $6,264**. The loss is on paper because depreciation is a noncash deduction. But the law limits how it can be used. Rental activities are generally **passive activities**, and passive losses can generally offset only passive income; unused losses carry forward. An exception lets owners who **actively participate** (own at least 10% and make real management decisions) deduct up to **$25,000** of rental loss against wages; Publication 527 explains that the allowance is reduced by half of the amount by which modified adjusted gross income exceeds $100,000 and disappears at $150,000. Qualified **real estate professionals** (more than 750 hours a year in real property businesses, and more than half their working time)

follow other rules. This is education, not advice; real returns belong with a CPA or enrolled agent.

Run the numbers. The Deal Analyzer's cash flow is figured *before* income taxes, and that is on purpose. Depreciation is not an operating expense, so it never belongs in the expense inputs, and the projected "total return" does not include tax savings. A careful investor makes the deal stand on its own cash flow first, then estimates the tax effect separately — and never lets a projected tax loss rescue a property that loses money. Watch for these mistakes: depreciating the full purchase price and forgetting the land; counting the CapEx reserve as a deduction (it is savings until spent, and a big replacement is usually depreciated, not deducted); counting principal as an expense; and assuming paper losses can offset wages when income is too high for the allowance. Keep the Rental worksheet as the cash view and build the tax view beside it.

PICTURE STUDY



The Hay Wain, John Constable, 1821 · Oil on canvas · The National Gallery, London

Image: Wikimedia Commons, public domain

John Constable (1776–1837) painted the Suffolk countryside where his father owned mills, and he painted it again and again because he knew it by heart. The cottage at the left belonged to a farmer named Willy Lott, who is said to have lived in it nearly all his long life; the building still stands at Flatford beside the River Stour. The picture opens this lesson because it shows exactly what the tax law separates: the land — the meadow, the water, the ground under the cottage — and the building on it, with its roof, walls and chimneys slowly yielding to two centuries of English weather.

Look closely

- Find the cottage. Its roof, walls and chimney are the parts that wear out — the only part of a property the tax law lets you depreciate.
- Look at the meadows and the stream. The land itself does not wear out; that is why it is never depreciated, no matter how long you own it.
- Notice the cart crossing the ford. Its wheels and frame wear with use, like the appliances and carpet in a rental that the law depreciates faster than the building.
- Look at the sky and the light. Constable was painting change — weather and seasons — the same slow work that eventually means every roof must be

replaced.

Talk about it

1. If you bought this cottage and its meadow together, how would you decide how much of the price belonged to the land and how much to the building?
2. Which parts of the cottage would be repairs if you fixed them, and which would be improvements if you replaced them?
3. Proverbs 27 says “riches are not for ever.” What does the slow wearing-out of every building teach a property owner about humility and diligent care?

PROJECT

Two Bottom Lines: The Cash View and the Tax View

You will take one property from your deal binder and build the tax view beside the cash view you already know. Using the county assessor's land and improvement values, you will allocate the basis, compute depreciation and estimate the first year's taxable income — then compare it with the cash flow from the Deal Analyzer. This is practice with pretend purchases; real tax returns belong with a CPA or enrolled agent and the current Publication 527.

You will need

- One analyzed listing from your deal binder (price, rent, expenses and loan terms)
- Your county assessor's website for the property's assessed land and improvement values
- IRS Publication 527 (free at irs.gov), especially chapter 2 and Table 2-2d
- A spreadsheet and the School Launch Deal Analyzer (Rental worksheet)

Steps

1. Run the property in the Rental worksheet with your best inputs and print it. Record the monthly principal and interest and the annual cash flow.
2. Look up the assessed land and improvement values. Compute the building ratio and apply it to a basis of price plus an estimated 2% of settlement costs.
3. Compute the full-year depreciation and the first-year depreciation for a month you choose, using both the formula and Table 2-2d.
4. In the spreadsheet, build a 12-month amortization table (or use the loan formula) to find the first year's interest and principal.
5. Make two columns. Cash view: rent collected minus operating expenses minus all loan payments. Tax view: rent minus operating expenses actually paid minus interest minus depreciation. Leave the CapEx reserve out of the tax view and note why.
6. Write two sentences reconciling the columns (cash flow = taxable income + depreciation − principal), and one sentence on whether the passive activity

rules might limit the loss.

7. File the printed worksheet and the two-column sheet in your deal binder with a one-paragraph verdict — buy, negotiate to a stated price, or walk away — that is based on the cash view, not the tax view.

INVESTOR'S NOTEBOOK

1. Flashcards: depreciation, basis, adjusted basis, recovery period, mid-month convention, Schedule E, repair, capital improvement, passive activity, active participation, cost segregation.
2. Draw a two-column table titled CASH VIEW / TAX VIEW for the worked example and draw arrows showing the two differences: depreciation (tax only) and principal (cash only).
3. Trap list: LAND is never depreciated · PRINCIPAL is not an expense · the CapEx reserve is not a deduction · a new ROOF is depreciated, a PATCH is deducted · depreciation "allowed or allowable" lowers basis even if you never claimed it.

KEY FORMULAS

$$\text{Building basis} = \text{total basis} \times \frac{\text{assessed building value}}{\text{total assessed value}}$$

$$\text{Annual depreciation (full year)} = \frac{\text{building basis}}{27.5}$$

$$\text{First-year depreciation} \approx \frac{\text{building basis}}{27.5} \times \frac{12.5 - \text{month placed in service}}{12}$$

$$\text{Taxable rental income} = \text{rent} - \text{operating expenses} - \text{mortgage interest} - \text{depreciation}$$

$$\text{Adjusted basis} = \text{basis} + \text{improvements} - \text{depreciation allowed or allowable}$$

From history. The Tax Reform Act of 1986 did more than set the 27.5-year recovery period. It also created the passive activity loss rules of Section 469. Before 1986, many high-income professionals had bought shares in limited partnerships designed mainly to produce paper losses from depreciation and interest, which they used to shelter wages. The new rules said rental losses could generally offset only passive income, and the market for such "tax shelter" partnerships collapsed — a reminder that a deal built on a tax rule can be undone by the next tax law.

Example 1. In this example, you buy a rental house for $300,000 and pay $6,000 of settlement costs that are added to basis. The county assessor values the property at $250,000: $50,000 land and $200,000 improvements. You place it in service in March. Find the depreciable basis, the full-year deduction and the first-year deduction.

Show solution

1. Total basis: $\$300{,}000 + \$6{,}000 = \$306{,}000$.
2. Building share from the assessor's ratio: $\$200{,}000 \div \$250{,}000 = 80\%$, so building basis $= 0.80 \times \$306{,}000 = \$244{,}800$ and land $= \$61{,}200$ (never depreciated).
3. Full year: $\$244{,}800 \div 27.5 = \$8{,}901.82$.
4. First year, placed in service in March (month 3): $\$8{,}901.82 \times \dfrac{12.5 - 3}{12} = \$8{,}901.82 \times 0.7917 \approx \$7{,}047$.
5. Check with Publication 527, Table 2-2d: the March rate for year 1 is 2.879%, and $\$244{,}800 \times 0.02879 \approx \$7{,}048$ — the same answer within rounding.

Answer: Depreciable basis $244,800; about $8,902 a full year; about $7,047 in the first year. The $61,200 allocated to land is never depreciated.

Example 2. In this example, the same house rents for $2,300 a month and is occupied all year. Operating expenses actually paid: taxes $3,000, insurance $1,400, repairs $1,800, management at 9% of collected rent and $600 of other costs. The $225,000 loan at 7% for 30 years has a payment of $1,496.93 a month; this year's interest is $15,678. Find the cash flow and the taxable income.

Show solution

1. Rent: $\$2{,}300 \times 12 = \$27{,}600$. Management: $0.09 \times \$27{,}600 = \$2{,}484$.
2. Operating expenses: $\$3{,}000 + \$1{,}400 + \$1{,}800 + \$2{,}484 + \$600 = \$9{,}284$.
3. Cash flow: $\$27{,}600 - \$9{,}284 - (\$1{,}496.93 \times 12) = \$27{,}600 - \$9{,}284 - \$17{,}963 = \$353$.
4. Taxable income: $\$27{,}600 - \$9{,}284 - \$15{,}678 - \$8{,}902 = -\$6{,}264$.
5. Reconcile: cash flow = taxable income + depreciation − principal: $-\$6{,}264 + \$8{,}902 - \$2{,}286 = \$352$ (a dollar of rounding).

Answer: Cash flow is about $+\$353$ while the return shows a loss of about $6,264. Depreciation is a noncash deduction, and principal is a nondeductible use of cash. Whether the loss can be used this year depends on the passive activity rules.

Example 3. A landlord spends money five ways this year: (a) $450 to patch a roof leak; (b) $14,000 to tear off and replace the entire roof; (c) $1,100 for a new refrigerator for the unit; (d) $900 to repaint a bedroom between tenants; (e) $38,000 to add a second bathroom. Classify each.

Show solution

1. (a) Patch: keeps the roof in working order — a **repair**, deducted this year.
2. (b) Whole roof: replaces a substantial structural part — a **restoration**, so an improvement depreciated over 27.5 years: $\$14{,}000 \div 27.5 = \$509$ a full year.
3. (c) Refrigerator: an appliance used in the rental — 5-year property under Table 2-1 (or possibly deductible under an elected safe harbor if it fits the current IRS limits).
4. (d) Repainting between tenants: ordinary upkeep — a **repair**.
5. (e) Added bathroom: enlarges and increases the property's capacity — a **betterment**, depreciated over 27.5 years.

Answer: Repairs: (a) and (d). Improvements: (b) and (e), each depreciated over 27.5 years. The refrigerator is 5-year property unless a safe harbor applies. Keep improvement receipts forever — they raise your basis.

PRACTICE

1. Easy What is the recovery period for a residential rental building, and what method is used?

   Show answer

   27.5 years, straight-line, with the mid-month convention (Publication 527). Nonresidential buildings use 39 years.

2. Easy Why is the land under a rental never depreciated?

   Show answer

   Land does not wear out, become obsolete or get used up, so the tax law does not allow depreciation on it; only the building and other improvements are depreciated.

3. **Easy** A landlord's mortgage payment is $1,400 a month, of which $1,150 is interest. How much of the year's payments is deductible on Schedule E?

Show answer

Only the interest: $\$1{,}150 \times 12 = \$13{,}800$. The $\$250 \times 12 = \$3{,}000$ of principal repays the loan and is not an expense.

4. **Medium** In this example, a rental costs $240,000 (basis) and the assessor's values are land $45,000 and building $135,000. Find the depreciable basis and the full-year depreciation.

Show answer

Building ratio $\$135{,}000 \div \$180{,}000 = 75\%$; depreciable basis $0.75 \times \$240{,}000 = \$180{,}000$; full year $\$180{,}000 \div 27.5 = \$6{,}545.45$.

5. **Medium** Using the property in problem 4, estimate the first-year depreciation if it is placed in service in October.

Show answer

$\$6{,}545.45 \times \dfrac{12.5 - 10}{12} = \$6{,}545.45 \times 0.2083 \approx \$1{,}364$. The mid-month convention gives 2.5 months for October. (Table 2-2d's October rate is 0.758%: $\$180{,}000 \times 0.00758 \approx \$1{,}364$.)

6. **Medium** Classify each: (a) replacing a broken window pane; (b) converting a detached garage into a rentable studio; (c) replacing all the plumbing in the house.

Show answer

(a) Repair. (b) Adaptation (and betterment) — an improvement, depreciated. (c) Restoration of a major building system — an improvement, depreciated over 27.5 years.

7. **Medium** A tenant pays a $1,800 security deposit and also prepays January's rent of $1,800 on December 20. Which amounts are rental income this year?

Show answer

The prepaid January rent is advance rent and is income in the year received. The security deposit is not income if you plan to return it; any part you later keep becomes income in that year.

8. Hard In this example, a rental collects $21,600, has operating expenses of $7,900, mortgage interest of $11,200, principal of $2,100 and depreciation of $6,800. Find cash flow and taxable income.

Show answer

Cash flow $= \$21{,}600 - \$7{,}900 - \$11{,}200 - \$2{,}100 = \$400$. Taxable income $= \$21{,}600 - \$7{,}900 - \$11{,}200 - \$6{,}800 = -\$4{,}300$. Check: $-\$4{,}300 + \$6{,}800 - \$2{,}100 = \$400$.

9. Hard An owner who actively participates has a $14,000 rental loss and modified adjusted gross income of $120,000. Under the rule described in Publication 527, how much of the loss may offset other income this year?

Show answer

Allowance $= \$25{,}000 - 0.5 \times (\$120{,}000 - \$100{,}000) = \$15{,}000$ (equivalently $0.5 \times (\$150{,}000 - \$120{,}000)$). The whole $14,000 loss fits under it. Education only — the real computation is on Form 8582.

10. Hard A landlord never claimed depreciation on a rental for six years because she “didn’t want to deal with it.” Why was that costly?

Show answer

Basis is reduced by depreciation allowed or allowable, so when she sells, her adjusted basis is lowered as if she had claimed it. She loses the deductions but still faces the gain they would have created. The IRS has procedures to correct missed depreciation; she should see a tax professional.

11. Challenge An investor considers a cost segregation study on a $1,200,000 apartment building. Explain one benefit and two costs or risks in three sentences.

Show answer

Benefit: shorter-lived components such as appliances, carpet and site improvements are depreciated faster, so more deductions come in early years. Costs: the study itself costs money, and faster depreciation lowers basis sooner, increasing the gain and recapture taxed when the building is sold. If the investor cannot use the losses because of the passive activity rules, the early deductions may simply carry forward.

12. **Challenge** A seller's flyer says, "This duplex loses only $100 a month, but the depreciation makes it a great investment!" Write a three-sentence response.

Show answer

A property that loses cash every month must be fed from savings, and depreciation does not pay the mortgage or the plumber. Whether the paper loss even reduces taxes depends on the passive activity rules and the buyer's income, and the depreciation is later taxed again through recapture when the property is sold. The deal should first be judged on its cash flow, reserves and risk, and a tax benefit is a bonus, never the reason to buy.

COMMON MISTAKES

- Depreciating the whole purchase price. Separate the land first — by fair market values or the assessor's ratio — and depreciate only the building.
- Deducting mortgage principal. Only interest is an expense; principal is repayment of borrowed money.
- Deducting a whole new roof, furnace or kitchen as a "repair." A betterment, restoration or adaptation is a capital improvement, added to basis and depreciated.
- Treating the CapEx reserve as a deduction. Money set aside is savings; the deduction (or depreciation) comes only when the money is spent, and it depends on what it was spent on.
- Assuming every rental loss reduces taxes on wages. Rental losses are generally passive; the $25,000 allowance requires active participation and phases out between $100,000 and $150,000 of modified adjusted gross income.
- Skipping depreciation to "keep it simple." Basis drops by depreciation allowed or allowable whether you claim it or not.

> **Make it a game · Repair or Improvement?.** Write twenty spending cards from this lesson and your imagination: "patch a roof leak," "replace the whole roof," "repaint between tenants," "add a bathroom," "new refrigerator," "fix a running toilet," "turn the garage into a studio." Shuffle. The reader flips a card; the first player to call REPAIR or IMPROVEMENT and name the test (betterment, restoration or adaptation) keeps it. A wrong call gives the card to the next player. After all cards, each player adds 1 point per card and 2 bonus points for correctly computing a full year's depreciation on any 27.5-year card worth more than $5,000.

> **Scripture.** “Be thou diligent to know the state of thy flocks, and look well to thy herds. For riches are not for ever: and doth the crown endure to every generation?” (Proverbs 27:23–24, KJV)
>
> The shepherd who knows the state of his flocks counts what is really there, not what he hopes is there. Depreciation is an honest admission that buildings, like flocks, do not last forever, and good records of basis, repairs and improvements are a landlord’s way of looking well to his herds. The verse also warns against treating any earthly asset, or any tax rule, as permanent.

9.2 Selling: Capital Gains, Recapture and the Home-Sale Exclusion

OBJECTIVES

- Compute amount realized, adjusted basis and gain on the sale of a rental property.
- Separate a rental's gain into the part due to depreciation (unrecaptured Section 1250 gain) and the remaining long-term capital gain, and distinguish short-term from long-term holding periods.
- State the Section 121 home-sale exclusion — $250,000 or $500,000, the 2-of-5-year ownership and use tests and the 2-year look-back — and apply it to a former home that became a rental.
- Explain why the rented unit of a duplex house hack is treated differently from the owner's unit, and why depreciation after May 6, 1997 is never excluded.
- Describe in outline how suspended passive losses are released on a fully taxable sale, and estimate net proceeds after selling costs before deciding to sell.

> **Warm-up.** Your family bought a house for $200,000 and sells it years later for $340,000. In five minutes, write down what you think the "profit" is, and then list everything you would need to know before you could be sure — what was spent on the house, what it cost to sell, whether anyone lived in it, and whether anyone rented it. Circle the item you think matters most.

WATCH

How Much Tax Will You Owe Selling a Rental? (Real Numbers Inside)

Coach Carson · 26:36

https://www.youtube.com/watch?v=SgNXl8eqa2U

> **WHEN TO WATCH**
> Watch from the start through about 17:54, after the second core idea; copy his whiteboard numbers for depreciation and adjusted cost basis into your notebook. The tax rates he uses are his own for one year — label them "his example" and do not memorize them.

BACKUP VIDEO

Depreciation Recapture Explained [Tax Smart Daily 007]

Hall CPA | Tax Smart Real Estate Investors · 7:57

https://www.youtube.com/watch?v=ex9Hd4Wizrs

A clear second explanation of the three kinds of recapture; watch before the practice set and note which kind applies to a straight-line rental building.

KEY TERMS

amount realized

Everything received in a sale — money, the fair market value of property or services and any liabilities the buyer assumes — minus selling expenses such as commissions.

realized gain

The amount by which the amount realized exceeds the adjusted basis of the property sold.

long-term capital gain

Gain on a capital asset, or on business real property treated like one, held more than 1 year; short-term gain comes from property held 1 year or less.

Section 1231 property

Real or depreciable property used in a trade or business, including rental real estate, held more than 1 year, whose net gain is generally treated as long-term capital gain.

depreciation recapture

The tax rule that treats gain attributable to depreciation deductions differently from other gain when depreciated property is sold.

unrecaptured Section 1250 gain

The part of the long-term gain on depreciated real property that is due to straight-line depreciation; it is taxed under a separate maximum rate rather than as ordinary capital gain.

Section 121 exclusion

The rule allowing an individual to exclude up to $250,000 of gain ($500,000 for most married couples filing jointly) on the sale of a main home owned and used as a main home for at least 2 of the 5 years before the sale.

ownership and use tests

The Section 121 requirements that the seller owned the home and lived in it as a main home for at least 24 months (730 days) each during the 5-year period ending on the date of sale; the periods need not be continuous.

look-back requirement

The Section 121 rule that the exclusion generally may be used only once in any 2-year period.

nonqualified use

Any period after 2008 during which neither the owner nor spouse used the property as a main home, with exceptions; gain allocated to it cannot be excluded.

suspended passive loss

A rental loss disallowed in earlier years by the passive activity rules and carried forward; generally allowed in full when the taxpayer disposes of the entire interest in a fully taxable transaction to an unrelated person.

CORE IDEAS

The story. For most of the twentieth century, selling a home was a tax puzzle. Under a rule that dated to 1951, a family could postpone the tax on the gain from selling its home only by buying another home of equal or greater price within a set time. Move from a large house to a small apartment in retirement, and the postponed gain from a lifetime of moves could come due at once. The only relief was a one-time exclusion for sellers 55 and older, which reached $125,000 in 1981. So families saved closing

statements and receipts for forty years, bought bigger houses than they wanted to avoid a tax bill, and dreaded downsizing. Then, on August 5, 1997, the Taxpayer Relief Act became law, and for sales after May 6, 1997, the old rollover rule was replaced by something far simpler.

How they figured it out. Congress replaced the rollover and the once-in-a-lifetime exclusion with one rule, Section 121 of the Internal Revenue Code: exclude up to **$250,000** of gain on a main home (**$500,000** for most married couples filing jointly) if you **owned** it and **used** it as your main home for at least **2 of the 5 years** before the sale, and you may generally use the exclusion once every 2 years. No requirement to buy again, no age test. Two later refinements matter to investors. First, depreciation claimed for periods after May 6, 1997 can never be excluded. Second, a 2008 law added the idea of **nonqualified use**: periods after 2008 when the property was not your main home generally reduce the exclusion, so an investor cannot rent a house for years, move in for two and exclude all the gain. IRS Publication 523, *Selling Your Home*, works these rules through worksheets and examples.

The big idea. Every sale starts with the same subtraction. **Amount realized** is the sale price (plus any debt the buyer assumes) minus selling expenses such as commissions and seller closing costs. **Adjusted basis** is what you paid plus purchase costs and capital improvements, minus depreciation allowed or allowable. **Gain** is amount realized minus adjusted basis. Property held **more than 1 year** produces long-term gain; property held 1 year or less produces short-term gain, taxed like ordinary income. Rental real estate held more than a year is **Section 1231 property**, and its gain is split in two. The part equal to the straight-line depreciation you took (or could have taken) is **unrecaptured Section 1250 gain**, taxed under its own maximum rate; the rest is long-term capital gain. The rates themselves change with tax law and income, so this course does not teach them as facts. Learn the structure; look up the current rates in the Schedule D instructions or with a tax professional.

Section 121 has three tests, and Publication 523 states each one precisely. **Ownership**: you owned the home at least 24 months of the 5 years ending on the closing date. **Use**: you lived in it as your main home at least 24 months (730 days) of those 5 years; the months need not be continuous. **Look-back**: you did not exclude gain on another home sold in the 2 years before this sale. For a married couple filing jointly to get the full $500,000, either spouse may meet the ownership test but both must meet the use test. Owners who fall short because of a job change, health or

certain unforeseen events may qualify for a reduced exclusion. Two investor rules follow. Gain equal to depreciation after May 6, 1997 is taxed even when the rest of the gain is excluded. And a period of nonqualified use reduces the exclusion proportionally — but time *after* you move out, within the 5-year window, does not count as nonqualified use. In Publication 523's example, an owner who lived in a house 3 years, rented it out and sold it 23 months after moving out met both tests and excluded everything except the depreciation.

Now the house hack. Publication 523 draws a sharp line between space **within your living area** and space **separate from it**. A rented spare bedroom inside your home does not require splitting the gain, though the depreciation on it is still taxable. But a **duplex in which you lived in one unit and rented the other** is Publication 523's own example of separate space: the gain on the rented unit cannot be excluded unless you also lived in that unit for 2 of the 5 years. You divide the sale price and basis between the units by the same method you used for depreciation, report the rental half on Form 4797, and exclude only the gain on your half. That is why the course's house-hack lessons treated the "live-in flip" and the duplex differently. If you moved from unit A to unit B partway through, the rules become harder; read the current publication and get professional help before counting on any exclusion.

Selling also settles the passive-loss account. Rental losses that the passive activity rules disallowed in earlier years are carried forward as **suspended losses**, and Publication 925 explains that they are generally allowed in full in the year you dispose of your **entire interest** in the activity in a fully taxable sale to an unrelated person. So a landlord who could not use years of paper losses may find them offsetting gain or other income in the year of sale. Selling costs are the other half of the truth: commissions, title charges, transfer taxes, concessions and repairs demanded after inspection commonly total 6% to 10% of the price in this example range. Add state income taxes where they apply. Many investors are surprised to learn that a property they "made $160,000 on" leaves far less in the bank after the loan payoff, the selling costs and the tax.

Run the numbers. The Rental worksheet's projection shows equity and "total return" before selling costs and taxes — a gross number, not money you could spend. Before deciding to sell, build the net: sale price minus selling costs minus loan balance equals cash at closing; then estimate the gain (amount realized minus adjusted basis), split it into the depreciation part and the rest, and set aside an estimate of tax

with a professional's help. Compare that net cash with the cash flow the property would keep producing if you held it. Classic mistakes: forgetting that depreciation lowers basis even if it was never claimed; believing the home-sale exclusion covers the rented unit of a duplex; waiting more than 3 years after moving out of a former home that you lived in for only 2 years, so the use test is no longer met; and quoting someone else's tax rate as if it were yours.

PICTURE STUDY



Capitol Hill Residence District, Seattle, Asahel Curtis, 1912 · Photograph · Asahel Curtis Photo Company Photographs, University of Washington Libraries Special Collections

Image: Wikimedia Commons, public domain

Asahel Curtis (1874–1941) photographed Seattle and Washington State for more than forty years, recording a city that grew from a frontier port into a metropolis; he was the younger brother of the photographer Edward S. Curtis. In 1912 he climbed the water tower in Volunteer Park and looked south down 14th Avenue East on Capitol Hill, then one of the city's newest neighborhoods of family homes. Many of these houses have been sold a dozen times since, and each sale required someone to answer this lesson's question: what did the owner really gain?

Look closely

- Find the large house on the corner in the foreground. Imagine its first owner selling it after twenty years. What records would he need to prove his basis?
- Look at the young street trees. They show how new the neighborhood was in 1912 — and how much of a home's later value can come from a neighborhood growing up around it.
- Count the houses with porches facing the street. These were built as main homes; some later became rentals, which changes how the tax law treats a sale.

- Look at the horizon. The city kept growing; long holding periods are where large gains — and large tax questions — come from.

Talk about it

1. If one of these houses had been rented for ten years and lived in for two, which parts of its gain would the home-sale exclusion cover and which would it not?
2. Why might a family keep a house it no longer needs, just to avoid a tax bill under the pre-1997 rules? How did the new rule change that?
3. Romans 13:7 tells us to render to all their dues. How can a seller be both careful to pay no more tax than the law requires and careful to pay every dollar it does require?

PROJECT

What Would You Keep After the Sale?

Choose one property from your deal binder and imagine you bought it ten years ago. Using real sale comparables for today's value and a reasonable pretend purchase price from county records, you will estimate the gain on a sale, divide it into the depreciation part and the remaining long-term gain, and compute the cash you would actually walk away with. Then you will rework the sale as if you had house-hacked it. This is education, not a tax return; the tax itself is left as a question for a professional.

You will need

- One deal-binder property with its Rental worksheet printout
- Your county's recorded sale history (or an assumed purchase price ten years ago) and three current sale comparables
- IRS Publication 523 and Publication 544 (free at irs.gov)
- A spreadsheet or the blank worksheet from the Deal Analyzer

Steps

1. Record the pretend purchase price ten years ago, add 2% purchase costs, and allocate land and building with the assessor's ratio.
2. Compute ten years of straight-line depreciation (ignore the mid-month detail) and add one pretend improvement in year 4.
3. Estimate today's value from the three sale comparables, and subtract 7% selling costs to find the amount realized.
4. Compute adjusted basis, gain, the unrecaptured Section 1250 part and the remaining long-term gain.
5. Find the loan balance after ten years in the Rental worksheet's projection, and compute cash at closing before tax.
6. Rework it as a duplex house hack: you lived in one of two equal units for the first 3 years and then moved out. Which gain could be excluded if you sold in year 4? In year 10?

7. File a one-page summary in your deal binder ending with a verdict paragraph: sell, hold or exchange (the next lesson) — and why.

INVESTOR'S NOTEBOOK

1. Flashcards: amount realized, adjusted basis, realized gain, long-term vs short-term, Section 1231, unrecaptured Section 1250 gain, Section 121, ownership and use tests, look-back, nonqualified use, suspended passive loss.
2. Draw a timeline of a five-year window ending on a sale date. Shade the months owned and the months lived in, and mark the 24-month line for each test.
3. Trap list: depreciation is NEVER excluded · the duplex's rented unit is SEPARATE · time AFTER you move out is not nonqualified use, but the 2-of-5 window still closes · rates change — structure doesn't.

KEY FORMULAS

$$\text{Amount realized} = \text{sale price} - \text{selling expenses}$$

$$\text{Adjusted basis} = \text{cost basis} + \text{improvements} - \text{depreciation allowed or allowable}$$

$$\text{Gain} = \text{amount realized} - \text{adjusted basis}$$

$$\text{Unrecaptured Section 1250 gain} = \text{the lesser of the gain or the straight-line depreciation taken}$$

$$\text{Remaining long-term gain} = \text{gain} - \text{unrecaptured Section 1250 gain}$$

From history. The 1951 rollover rule that the Taxpayer Relief Act replaced had a long shadow: because the postponed gain followed a family from house to house, some retirees in the 1990s owed tax on gains from homes sold decades earlier. The new Section 121 exclusion did not require any record of earlier homes. One quiet consequence was that federal home-sale reporting became much simpler for most families, while investors gained a reason to study the 2-of-5 rule closely.

WORKED EXAMPLES

Example 1. In this example, an investor bought a rental 10 years ago with a cost basis of $204,000 (price plus purchase costs). In year 5 she replaced the roof for $12,000. Depreciation allowed over the 10 years totals about $61,500. She sells for $340,000 and pays selling costs of 7%. Find the amount realized, the adjusted basis, the gain and how the gain divides.

Show solution

1. Amount realized: $\$340{,}000 \times (1 - 0.07) = \$340{,}000 - \$23{,}800 = \$316{,}200$.
2. Adjusted basis: $\$204{,}000 + \$12{,}000 - \$61{,}500 = \$154{,}500$.
3. Gain: $\$316{,}200 - \$154{,}500 = \$161{,}700$.
4. Depreciation part (unrecaptured §1250 gain): $61,500. Remaining long-term capital gain: $\$161{,}700 - \$61{,}500 = \$100{,}200$.
5. Where the depreciation came from (rounded): building basis $\$163{,}200 \div 27.5 \approx \$5{,}935$ a year for 10 years $\approx \$59{,}345$, plus the roof $\$12{,}000 \div 27.5 \approx \$436$ a year for 5 years $\approx \$2{,}182$.

Answer: Gain $161,700: $61,500 taxed as unrecaptured Section 1250 gain and $100,200 as long-term capital gain, at whatever rates apply that year. The depreciation that lowered her taxes for a decade comes back into the computation at the sale.

Example 2. In this example, a young couple house-hacked a duplex bought for $400,000, living in unit A and renting identical unit B for 3 years. They allocate 50% of everything to each unit; land is 20% of the basis. They claimed $17,450 of depreciation on unit B. They sell, and the amount realized is $480,000. How much gain can be excluded under Section 121?

Show solution

1. Unit A (their home): amount realized $240,000, basis $200,000, gain $40,000. They owned and lived there 3 of the last 5 years, so it qualifies and is excluded.
2. Unit B (the rental): it is space separate from their living area, so it does not qualify unless they lived in it 2 of the 5 years.
3. Unit B depreciation check: building basis $\$200{,}000 \times 0.80 = \$160{,}000$; $\$160{,}000 \div 27.5 \times 3 \approx \$17{,}455$ (they used $17,450).
4. Unit B adjusted basis $= \$200{,}000 - \$17{,}450 = \$182{,}550$; gain $= \$240{,}000 - \$182{,}550 = \$57{,}450$.
5. Unit B gain divides into $17,450 unrecaptured §1250 gain and $40,000 long-term capital gain, reported on Form 4797.

Answer: They may exclude the $40,000 gain on unit A. The $57,450 gain on unit B is taxable. A house hack's rented unit is a rental for tax purposes.

Example 3. In this example, Mr. Ortiz bought a house on June 1, 2020 for $300,000, lived in it until June 1, 2023, then rented it out and claimed $16,000 of depreciation. He sells on May 1, 2025 with an amount realized of $420,000. He has used no other exclusion. (a) Does he qualify? (b) What is excluded? (c) What if he waited to sell until December 1, 2026?

Show solution

1. The 5-year window for a May 1, 2025 sale runs back to May 1, 2020. He owned it from June 2020 on (about 59 months) and lived in it June 2020 – June 2023 (36 months). Both tests are met.
2. The rental period came after his last use as a main home, within the window, so it is not nonqualified use.
3. Gain: $\$420{,}000 - (\$300{,}000 - \$16{,}000) = \$420{,}000 - \$284{,}000 = \$136{,}000$. The $16,000 of depreciation cannot be excluded; $\$136{,}000 - \$16{,}000 = \$120{,}000$ is excluded.
4. If he sold December 1, 2026, the window would run back to December 1, 2021; he lived there only from December 2021 to June 2023 — 18 months — and would fail the 24-month use test.

Answer: (a) Yes. (b) $120,000 excluded; $16,000 taxed as unrecaptured Section 1250 gain. (c) Waiting would have cost him the exclusion — a former home kept as a rental has a deadline.

PRACTICE

1. Easy State the maximum Section 121 exclusion for a single filer and for most married couples filing jointly.

   Show answer

   $250,000 for a single filer and $500,000 for most married couples filing jointly who meet the tests.

2. Easy How long must property be held for gain to be long-term?

   Show answer

   More than 1 year. Property held 1 year or less produces short-term gain.

3. **Easy** A rental sells for $250,000 with $17,500 of selling costs. What is the amount realized?

Show answer

$250,000 - $17,500 = $232,500.

4. **Medium** In this example, a rental's cost basis is $180,000, improvements total $20,000 and depreciation allowed is $48,000. Find the adjusted basis.

Show answer

$180,000 + $20,000 - $48,000 = $152,000.

5. **Medium** Using problem 4, the property's amount realized is $295,000. Find the gain and divide it.

Show answer

Gain = $295,000 - $152,000 = $143,000. Unrecaptured §1250 gain $48,000; remaining long-term gain $95,000.

6. **Medium** A single woman owned and lived in her home for 18 months, then sold it at a $60,000 gain for no special reason. Does the full Section 121 exclusion apply?

Show answer

No. She does not meet the 24-month ownership and use tests. Unless she qualifies for a reduced exclusion (job change, health or certain unforeseen circumstances), the gain is taxable.

7. **Medium** A couple files jointly. The husband owned the house 6 years; the wife moved in after their wedding 14 months ago. Can they exclude $500,000?

Show answer

No. Either spouse may meet the ownership test, but both must meet the use test for the $500,000 maximum. The husband may be able to exclude up to $250,000 on his own qualification; they should check Publication 523's rules for this situation.

8. Hard Why does the rented half of a duplex house hack not qualify for the home-sale exclusion, while a rented bedroom inside a single-family home does?

Show answer

Publication 523 treats a separate dwelling unit as space separate from the owner's living area; gain on it is excluded only if the owner lived in that unit 2 of 5 years. A bedroom inside the home is within the living area, so no allocation of gain is required — though depreciation taken on it is still taxable.

9. Hard In this example, an owner lived in a house from January 2018 through December 2021 (4 years), then rented it. What is the last date she could sell and still meet the 2-of-5 use test?

Show answer

She needs 24 months of use inside the 5 years before the sale. Her use ended December 31, 2021, so the window can start no later than January 1, 2020 (keeping 2020–2021). A sale by about December 31, 2024 keeps 24 months in the window; after that, the use test fails.

10. Hard A landlord has $18,000 of suspended passive losses on a rental. What generally happens to them when he sells the entire property to an unrelated buyer in a taxable sale?

Show answer

Under Publication 925, suspended losses are generally allowed in full in the year he disposes of his entire interest in a fully taxable transaction to an unrelated person, so they can offset the gain or other income that year.

11. Challenge In this example, a rental has $190,000 of gain, of which $70,000 is depreciation. The loan payoff is $160,000, the sale price $420,000 and selling costs 8%. Compute the cash at closing before tax, and explain why it differs from the gain.

Show answer

Selling costs $= \$33{,}600$; cash at closing $= \$420{,}000 - \$33{,}600 - \$160{,}000 = \$226{,}400$. Gain measures profit over adjusted basis; cash depends on how much is still owed. A highly leveraged owner can owe tax on a large gain while receiving little cash, especially if he refinanced and took cash out earlier.

12. **Challenge** A friend plans to buy a rental, rent it for 8 years, then move in for 2 years and exclude all the gain. Explain what the rules say about this plan.

Show answer

Periods after 2008 when the property was not a main home are generally nonqualified use. Gain is allocated by time, so roughly 8/10 of the gain (excluding the depreciation, which is taxed anyway) would not be excludable. The plan saves far less than he thinks, and the depreciation from the rental years is never excluded.

COMMON MISTAKES

- Using the purchase price as the basis at sale. Adjust it: add purchase costs and improvements, subtract depreciation allowed or allowable.
- Forgetting selling costs. Amount realized is the price minus commissions, seller closing costs and other selling expenses.
- Believing the home-sale exclusion covers depreciation. Depreciation for periods after May 6, 1997 is never excluded.
- Treating the rented unit of a duplex house hack as part of the home. It is separate space; its gain is taxable unless you lived in that unit 2 of the 5 years.
- Waiting too long to sell a former home. The 24 months of use must fall inside the 5 years before the sale date.
- Stating someone else's tax rate as a fact. Rates depend on the year, the kind of gain and the seller's income; learn the structure and look up the rates.

> **Make it a game · The Five-Year Window.** Draw a five-year timeline on a long strip of paper with 60 month boxes. One player secretly writes a story: when a pretend owner bought, moved in, moved out, rented and sold. The others take turns shading boxes as the story is read aloud, then race to call QUALIFIES or FAILS for the 2-of-5 test and to name which gain is never excluded. A correct call earns 2 points; naming the depreciation trap earns 1 more. Rotate storytellers; the first to 15 points wins.

> **Scripture.** “Render therefore to all their dues: tribute to whom tribute is due; custom to whom custom; fear to whom fear; honour to whom honour.” (Romans 13:7, KJV)
>
> Paul tells believers to pay what is owed, plainly and without resentment. A careful seller may lawfully use every exclusion and rule the law provides, but honest records of basis, depreciation and use are part of rendering what is due. Learning these rules is not a search for loopholes; it is learning to pay exactly what is owed — no more and no less.

9.3 The 1031 Exchange

OBJECTIVES

- State what qualifies for a Section 1031 like-kind exchange: real property held for productive use in a business or for investment, not a main home and not property held primarily for sale.
- Lay out a deferred exchange on a calendar: the qualified intermediary, the 45-day identification period, the three-property and 200% rules, and the 180-day (or return-due-date) exchange period.
- Compute realized gain, boot (cash and net debt relief), recognized gain and deferred gain in an exchange.
- Compute the basis of replacement property and explain why an exchange defers tax rather than forgiving it, including the concept of a stepped-up basis at death.
- Judge when an exchange makes sense and when paying the tax, or keeping the property, is wiser.

> **Warm-up.** Imagine you own a small rental that has gone up a great deal in value, and you would like to trade it for a fourplex. In five minutes, write down what could go wrong if you sold the house first and then went shopping for the fourplex — think about time, money and taxes. Then write one sentence: should a tax rule ever push you to buy faster than you would otherwise?

WATCH

What Is A 1031 Exchange & Should You Use One?

BiggerPockets · 5:08

https://www.youtube.com/watch?v=LPnsqanffBs

> **WHEN TO WATCH**
> Watch after the third core idea; as he explains the exchange, write the three requirements you hear and check them against the lesson's list. His enthusiasm is real, but remember the lesson's rule: an exchange defers tax; it does not erase it.

BACKUP VIDEO

How to Sell a Rental and Pay ZERO Taxes (1031 Exchange Step-by-Step)

Coach Carson · 44:17

https://www.youtube.com/watch?v=0VDqdVYOsHM

A long interview; watch 17:38–28:32, where the rules, the timeline and the sale are explained, and mark every deadline she mentions on your exchange calendar. Ignore the title's "ZERO taxes": the tax was deferred, not erased.

KEY TERMS

like-kind exchange (Section 1031)

An exchange of real property held for productive use in a trade or business or for investment for other such real property, in which gain is deferred rather than recognized, except to the extent of boot.

like-kind property

Property of the same nature or character; for exchanges after 2017 only real property qualifies, and almost any U.S. investment or business real estate is like-kind to any other, but U.S. and foreign real property are not.

relinquished property

The property given up in an exchange.

replacement property

The like-kind property received in an exchange.

deferred exchange

An exchange in which the replacement property is received after the relinquished property is transferred, subject to the identification and receipt deadlines.

qualified intermediary (QI)

A person who is not the taxpayer's agent or relative, who under a written exchange agreement holds the sale proceeds and acquires and transfers the properties so the taxpayer never actually or constructively receives the money.

identification period

The 45 days after the relinquished property is transferred, within which replacement property must be identified in a signed writing.

exchange period

The period ending on the earlier of the 180th day after the transfer or the due date, including extensions, of the tax return for that year, by which replacement property must be received.

boot

Money, non-like-kind property or net relief from debt received in an exchange; realized gain is recognized to the extent of boot.

deferred gain

Realized gain that is not recognized in an exchange; it is carried into the replacement property by reducing its basis.

stepped-up basis

The general rule that the basis of property inherited from a decedent is its fair market value on the date of death.

CORE IDEAS

The story. In 1967 T. J. Starker, his son Bruce and Bruce's wife Elizabeth agreed to transfer about 1,800 acres of Oregon timberland to the Crown Zellerbach Corporation. They did not want cash; they wanted other land. So Crown Zellerbach promised to find and deliver timberland or other real estate of the Starkers' choosing within five years, crediting them with the value until it did. Over the following years the company deeded them a series of parcels. The IRS objected: an exchange, it said,

had to be a simultaneous swap, and a promise to deliver land later was really a sale, fully taxable. The family went to court, and in *Starker v. United States* (1979) the federal appeals court for the Ninth Circuit agreed with T. J. Starker that his delayed exchange could still qualify. The case opened the door to the modern "delayed" or "Starker" exchange — and to so many open-ended deals that Congress soon stepped in to set limits.

How they figured it out. The idea of postponing tax when one investment property is traded for another went back to the Revenue Act of 1921. After *Starker*, Congress in 1984 wrote deadlines into the law: the replacement property must be identified within **45 days** and received within **180 days**. In 1991 the Treasury issued regulations creating safe harbors, especially the **qualified intermediary**, an independent party who holds the sale proceeds so the investor never touches them. In 2017 Congress narrowed the rule to **real property** only, beginning with exchanges in 2018; equipment and vehicles no longer qualify. Publication 544, *Sales and Other Dispositions of Assets*, and the Instructions for Form 8824 spell out the rules that investors follow today.

The big idea. A **Section 1031 exchange** lets an investor sell one investment or business property and buy another while **deferring** the tax on the gain. Both properties must be real property held for productive use in a trade or business or for investment. A rental house, a fourplex, a storefront and a vacant lot held for investment are all like-kind to one another; city property may be exchanged for farmland, and improved for unimproved. Three kinds of property never qualify: your **personal residence**, real property **held primarily for sale** (a flip, or lots a developer is selling), and foreign real property traded for U.S. real property. Deferral is the key word. The gain does not disappear; it rides along into the new property through a lower basis, and it can come due when that property is sold in a taxable sale.

The mechanics run on a calendar that starts the day the old property closes. The proceeds go to a **qualified intermediary** under a written exchange agreement; if you actually or constructively receive the money — even into your own account for a day — the deal becomes a taxable sale. Within **45 days** you must identify replacement property in a signed writing delivered to the intermediary or another proper party, describing it clearly by address or legal description. You may identify up to **three properties** of any value, or any number whose total value is not more than **200%** of

what you gave up (with a narrow 95% exception). You must then receive the replacement by the **earlier** of the 180th day or the due date, including extensions, of your tax return for the year of the sale. In this example, a sale closing March 3, 2026 sets day 45 at April 17 and day 180 at August 30. A sale closing November 2, 2026 reaches day 180 on May 1, 2027 — after the usual April 15 return date — so the investor must extend the return to keep the full 180 days. Exchanges with related persons carry a 2-year holding rule, and every exchange is reported on Form 8824.

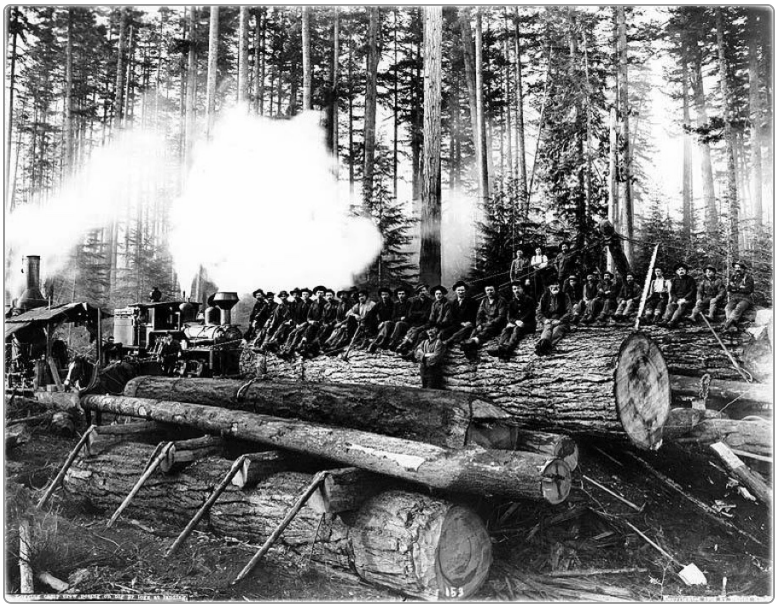
When an exchange is not perfectly balanced, part of the gain is taxed. **Boot** is anything that is not like-kind real property: cash taken out at closing, non-like-kind property, or **net debt relief** — paying off a larger loan on the old property than you take on the new. Publication 544's rule is that recognized gain is the **smaller** of the realized gain or the boot (cash boot is reduced by exchange expenses you paid). Investors remember a rule of thumb for full deferral: buy replacement property of **equal or greater value**, reinvest **all** the net cash, and take on equal or greater debt (or add cash to make up the difference). The deferred gain lowers the **basis** of the replacement: replacement basis is generally its cost minus the deferred gain. That lower basis means smaller depreciation deductions on the new property than a cash purchase would give, and the deferred gain — including the depreciation from the old property — waits inside the new one.

Some investors exchange again and again — "swap till you drop." The reason is a separate rule: Publication 551 explains that the basis of property inherited from someone who dies is generally its **fair market value at the date of death**. Under current law, the deferred gain carried through a chain of exchanges is not taxed to the heirs; their basis simply "steps up." Laws can change, and estate planning belongs with an attorney, but the concept explains why exchanges are popular with long-term holders. An exchange is not always wise. It makes sense when you would buy a better replacement anyway, at a fair price, with numbers that work. It makes little sense if you need the cash, if the gain is small, if the 45-day clock pushes you to overpay for a weak deal, if you have a loss (losses are not recognized in an exchange), or if intermediary and transaction costs eat the benefit. A former home that became a rental can sometimes combine Section 121 and Section 1031; Publication 523 explains that combination.

Run the numbers. An exchange changes taxes, not the property's cash flow, so the replacement must still pass the Rental worksheet on its own: enter its price, its new

loan and the exchange equity as your down payment, and check cash flow, DSCR and cash-on-cash. Then compare two paths in your notebook. Path one: exchange, keep all the equity working, accept a lower basis. Path two: sell, pay the tax (estimate it with a professional), and buy something smaller or keep the cash. Watch for the classic mistakes: letting the deadline rush you into a property you would never have bought (the “tax tail wagging the dog”); taking cash at closing and being surprised by boot; paying off a large loan and buying with a smaller one, creating debt-relief boot; touching the proceeds; and forgetting that the deferred gain is still there, waiting.

PICTURE STUDY



Logging Camp Crew Posing on Big Fir Logs at Landing, Washington, Darius Kinsey, 1908 · Photograph · Kinsey Brothers Photographs, University of Washington Libraries Special Collections

Image: Wikimedia Commons, public domain

Darius Kinsey (1869–1945) spent more than forty years hauling heavy cameras and glass-plate negatives into the logging camps of western Washington, photographing crews beside the giant Douglas firs they felled. His pictures were sold to the loggers themselves as souvenirs, and they are now a priceless record of Northwest forest work. This crew sat for him at a landing in 1908, the same kind of Northwest timber country that T. J. Starker owned and exchanged in the Oregon case that created the modern delayed exchange.

Look closely

- Look at the size of the logs. Timberland like this was valuable for decades as the trees grew — exactly the kind of long-held investment real estate that builds large gains.
- Find the steam donkey engine at the left. It shows that the land was being used in a business, which is one of the two ways property qualifies for an exchange.
- Notice the men lined up in a row. Each worked for an owner who had to decide what to do with land after the timber was cut: sell it, hold it or trade it.
- Look at the forest behind them. Real estate is like-kind to other real estate — timberland could be exchanged for farmland or a city building.

Talk about it

1. Why would the Starkers rather receive other land than cash for their timberland?
2. If an owner had to identify replacement land within 45 days, how could the deadline lead to a bad decision — and how could he prepare in advance?
3. Proverbs 21:5 contrasts the diligent with the hasty. How does a tight deadline test whether an investor is diligent or merely hasty?

PROJECT

The 45-Day Clock

You will plan a pretend exchange from start to finish. Take a rental from your deal binder, pretend it sells on a date you choose, and build the exchange calendar. Then find three real replacement listings, analyze each in the Rental worksheet, compute the boot each one would create, and choose — or decide that paying the tax is the better path.

You will need

- One deal-binder rental with an assumed adjusted basis and loan balance
- Three current listings of larger rentals (duplexes to fourplexes) in your market
- IRS Publication 544 (like-kind exchanges) and the Instructions for Form 8824
- A calendar, a spreadsheet and the Deal Analyzer's Rental worksheet

Steps

1. Choose a pretend closing date for your sale. Count and mark day 45 and day 180 on the calendar, and note the tax-return due date; decide whether an extension would be needed.
2. Compute the amount realized (price minus 7% selling costs), the realized gain and the cash the intermediary would hold after the loan payoff.
3. Find three replacement listings and write the identification you would sign: address, price and the total value compared with 200% of your sale price.
4. Run each listing in the Rental worksheet, using all the exchange cash as the down payment and a loan for the rest; record cash flow, DSCR and cash-on-cash.
5. For each, compute cash boot, debt relief, recognized gain, deferred gain and replacement basis.
6. Compare with a no-exchange path: sell, set aside an estimated tax (ask a parent or tax professional to help you pick a rate to use as an example), and keep the cash.

7. File the calendar, the three worksheets and a one-paragraph verdict in your deal binder: which replacement you would choose, at what offer price, or why you would not exchange at all.

INVESTOR'S NOTEBOOK

1. Flashcards: like-kind, relinquished property, replacement property, deferred exchange, qualified intermediary, identification period, exchange period, three-property rule, 200% rule, boot, deferred gain, stepped-up basis.
2. Draw the exchange timeline: SALE CLOSES (day 0) → IDENTIFY by day 45 → CLOSE by day 180 or the return due date, whichever is EARLIER, with the intermediary holding the money in between.
3. Trap list: deferral is not forgiveness · never touch the proceeds · cash out = boot · less debt = boot · flips and your home don't qualify · a deadline is not a reason to overpay.

KEY FORMULAS

$$\text{Realized gain} = \text{amount realized} - \text{adjusted basis of relinquished property}$$
$$\text{Boot} = \text{cash received} + \text{non-like-kind property} + \text{net debt relief}$$
$$\text{Recognized gain} = \min(\text{realized gain},\ \text{boot})$$
$$\text{Deferred gain} = \text{realized gain} - \text{recognized gain}$$
$$\text{Replacement basis} \approx \text{cost of replacement} - \text{deferred gain}$$

From history. Before 2018, investors could also exchange personal property such as airplanes, trucks, equipment and even artwork under Section 1031. The 2017 tax law limited like-kind exchanges to real property for exchanges completed after December 31, 2017, which is why real estate is now the whole story. Publication 544 notes that incidental items such as furniture or laundry machines transferred with an apartment building are not treated as separate property for identification if their value is not more than 15% of the building's.

Example 1. In this example, an investor's rental has an adjusted basis of $150,000. It sells with an amount realized of $400,000; the $120,000 loan is paid off, and the qualified intermediary holds the remaining $280,000. Within the deadlines she buys a $650,000 fourplex using all $280,000 and a new $370,000 loan. Find the realized gain, the boot, the recognized and deferred gain, and the fourplex's basis.

Show solution

1. Realized gain: $\$400{,}000 - \$150{,}000 = \$250{,}000$.
2. Cash boot: none — every dollar of the $280,000 was reinvested. Debt: old loan $120,000, new loan $370,000; she took on more debt than she was relieved of, so no debt-relief boot.
3. Recognized gain: $\min(\$250{,}000,\ \$0) = \$0$. Deferred gain: $250,000.
4. Replacement basis: $\$650{,}000 - \$250{,}000 = \$400{,}000$ (the same as old basis $150,000 plus the added net debt $250,000).

Answer: No gain is recognized now; $250,000 is deferred, and the fourplex's basis is $400,000, not its $650,000 price. She will depreciate less than a cash buyer would.

Example 2. Same sale as Example 1, but she buys a $600,000 property with a $340,000 loan, uses $260,000 of the exchange funds and has the intermediary send her the other $20,000 at closing. Ignore exchange expenses. Find the recognized gain, the deferred gain and the replacement basis.

Show solution

1. Realized gain is still $250,000.
2. Cash boot: $20,000. Debt: new loan $340,000 exceeds the old $120,000, so no debt-relief boot (and taking on more debt does not cancel cash boot received).
3. Recognized gain: $\min(\$250{,}000,\ \$20{,}000) = \$20{,}000$.
4. Deferred gain: $\$250{,}000 - \$20{,}000 = \$230{,}000$. Replacement basis: $\$600{,}000 - \$230{,}000 = \$370{,}000$.

Answer: $20,000 of gain is taxable this year; $230,000 is deferred; the new property's basis is $370,000. Cash pulled out of an exchange is taxed up to the amount of the gain.

Example 3. In this example, an investor with an adjusted basis of $150,000 sells for an amount realized of $400,000 and pays off a $200,000 loan; the intermediary holds $200,000. She buys a $350,000 replacement with all $200,000 and a new $150,000 loan. Find the boot and the recognized gain.

Show solution

1. Realized gain: $\$400{,}000 - \$150{,}000 = \$250{,}000$.
2. Cash boot: none. Debt relief: $\$200{,}000 - \$150{,}000 = \$50{,}000$ net debt relief, with no added cash to offset it — boot of $50,000.
3. Recognized gain: $\min(\$250{,}000,\ \$50{,}000) = \$50{,}000$. Deferred gain: $200,000.
4. Replacement basis: $\$350{,}000 - \$200{,}000 = \$150{,}000$. She also "traded down" in value: $\$350{,}000 < \$400{,}000$.

Answer: Boot $50,000, all from debt relief; $50,000 of gain is recognized. Adding $50,000 of her own cash to the purchase (or borrowing $200,000) would have offset it.

PRACTICE

1. Easy Name two kinds of property that cannot be exchanged under Section 1031.

Show answer

Any two of: a personal residence; real property held primarily for sale (such as a flip); foreign real property exchanged for U.S. property; and, since 2018, any personal property such as equipment or vehicles.

2. Easy What are the two deadlines in a deferred exchange?

Show answer

Identify replacement property within 45 days of transferring the old property, and receive it by the earlier of 180 days or the tax-return due date including extensions.

3. Easy Why must the sale proceeds go to a qualified intermediary?

Show answer

If the investor actually or constructively receives the money, the transaction is treated as a taxable sale. The intermediary holds the funds under a written agreement that limits the investor's access.

4. Medium In this example, a sale closes on June 10. Find day 45 and day 180.

Show answer

Day 45 is July 25 (20 days left in June + 25 in July). Day 180 is December 7 (20 + 31 + 31 + 30 + 31 + 30 = 173 through November 30, plus 7). Day 180 falls before the return due date, so it controls.

5. Medium An investor's relinquished property sold for $500,000. Under the 200% rule, what is the most total value he may identify if he names five properties?

Show answer

$2 \times \$500{,}000 = \$1{,}000{,}000$. With three or fewer properties, there is no value limit.

6. Medium Adjusted basis $120,000; amount realized $330,000; cash boot received $15,000. Find realized, recognized and deferred gain.

Show answer

Realized $210,000; recognized $\min(\$210{,}000, \$15{,}000) = \$15{,}000$; deferred $195,000.

7. Medium A flipper wants to use a 1031 exchange to defer tax on the profit from a house he bought, renovated and sold in five months. Explain the problem.

Show answer

A flip is real property held primarily for sale, which does not qualify. The property must be held for productive use in a business or for investment.

8. Hard In this example, the old loan paid off is $260,000 and the new loan is $210,000; all cash is reinvested and no cash is added. Realized gain is $180,000. Find the recognized gain and how she could have avoided it.

Show answer

Net debt relief $50,000 is boot, so recognized gain is $50,000. She could have borrowed at least $260,000 or added $50,000 of her own cash.

9. Hard Replacement cost $520,000; deferred gain $175,000. Find the replacement basis and the building's full-year depreciation if 25% of the basis is land.

Show answer

Basis $\$520{,}000 - \$175{,}000 = \$345{,}000$; building $0.75 \times \$345{,}000 = \$258{,}750$; depreciation $\$258{,}750 \div 27.5 = \$9{,}409$ a year.

10. Hard An investor's property has fallen in value: adjusted basis $300,000, amount realized $260,000. Should she exchange?

Show answer

Probably not for tax reasons. An exchange defers gain, and losses are not recognized in an exchange; a taxable sale would let her recognize the $40,000 loss (subject to the tax rules). She should decide on the merits of the properties, with professional help.

11. **Challenge** Explain “swap till you drop” and stepped-up basis in three sentences, and add one caution.

    Show answer

    An investor who exchanges repeatedly carries deferred gain from property to property with a low basis. If she holds the last property until death, her heirs generally receive a basis equal to fair market value on the date of death, so under current law the deferred gain is never taxed to them. Caution: tax law can change, and holding property only for a tax result can mean keeping a poor investment too long.

12. **Challenge** On day 38, an investor has found nothing good. The best listing available is overpriced by about $40,000 and cash-flows negatively. The deferred tax at stake is, in this example, about $45,000. Write a three-sentence recommendation.

    Show answer

    Paying $40,000 too much and accepting negative cash flow could cost more than the tax deferred, and the deferred tax is not erased anyway. The investor should identify only properties she would buy without the tax rule, or let the exchange fail and pay the tax. Next time, she should line up replacement candidates before her sale closes.

COMMON MISTAKES

- Thinking a 1031 exchange eliminates tax. It defers gain into the replacement property’s lower basis.
- Receiving the proceeds, even briefly. Actual or constructive receipt turns the exchange into a taxable sale; use a qualified intermediary from the start.
- Counting 180 days without checking the return due date. The deadline is the earlier of day 180 or the due date, including extensions.
- Overlooking debt-relief boot. Paying off a larger loan than you take on is boot unless you add cash.
- Trying to exchange a flip or a main home. Property held primarily for sale and personal residences do not qualify.
- Letting the deadline choose the property. A rushed, overpriced replacement can cost more than the tax deferred.

Make it a game · Beat the Boot. Each player gets a card with a pretend sale: adjusted basis, amount realized and old loan. The dealer turns over replacement cards one at a time, each showing a price and a new loan. Players race to say whether the swap creates BOOT and how much (cash out, debt relief, or none). A correct call with the right amount wins the card; a correct call of NONE wins a bonus. After 12 cards, the player with the most deferred gain kept wins — but anyone who picked a replacement with negative cash flow must give one card back.

Scripture. "The thoughts of the diligent tend only to plenteousness; but of every one that is hasty only to want." (Proverbs 21:5, KJV)

An exchange has hard deadlines, and deadlines tempt us to hurry. Solomon's contrast is not between fast and slow but between the diligent, who think ahead, and the hasty, who rush without thought. The diligent investor studies replacement properties before the sale ever closes, so the clock never forces a foolish purchase.

9.4 Insurance, Umbrellas and LLCs

OBJECTIVES

- Distinguish a landlord (dwelling) policy from a homeowner's policy and name its main coverages: dwelling, other structures, fair rental value (loss of rents) and premises liability.
- Set a dwelling coverage amount from rebuilding cost rather than market price, and size loss-of-rents coverage from the rent at risk.
- Identify the common gaps — flood, earthquake, sewer backup, vacancy limits and the tenant's own belongings — and the coverages that fill them, including the 30-day waiting period for a new National Flood Insurance Program policy.
- Explain how umbrella liability insurance layers over underlying limits, and compute who pays what in a large claim.
- Describe honestly what a limited liability company can and cannot protect, including personal negligence, personal guarantees, commingling and the due-on-sale risk of transferring a mortgaged property.

> **Warm-up.** A pipe bursts in a rental house in January and the tenant has to move out for three months while the floors and walls are rebuilt. In five minutes, list every cost the owner faces — repairs, the tenant's belongings, the lost rent, the mortgage that keeps coming due. Next to each, write who you think should pay it. You will match your list to the coverages in this lesson.

WATCH

How Much Landlord Insurance Do I Need?

Coach Carson · 13:53

https://www.youtube.com/watch?v=13XLFCbC4xs

> **WHEN TO WATCH**
> Watch after the third core idea; use the chapter marks (property damage at 3:25, liability at 4:49, replacement of rental income at 6:58, saving money at 9:15) and write one sentence for each coverage in your notebook. His dollar figures are examples; get your own quotes.

BACKUP VIDEO

LLC or Umbrella Insurance: Which Is Better for Investors?

BiggerPockets · 8:18

https://www.youtube.com/watch?v=w1zCL4bwhyM

A short comparison of umbrella insurance and LLCs from an attorney's point of view; watch before the practice set and list one situation where each one helps and one where it does not.

KEY TERMS

dwelling (landlord) policy

Property insurance written for a residence that is rented to others, covering the building, other structures, loss of rental income and, usually, premises liability; it differs from a homeowner's policy, which assumes the owner lives there.

actual cash value

Coverage that pays replacement cost minus depreciation for the age and condition of the damaged property.

replacement cost

Coverage that pays to repair or rebuild with materials of like kind and quality without a deduction for depreciation, up to the policy limit.

fair rental value (loss of rents)

Coverage that replaces rent lost while a covered loss makes the rental unfit to occupy, up to a limit or a period.

premises liability

Coverage that defends and pays claims for bodily injury or property damage that others suffer because of the condition of the insured property.

deductible

The amount of a covered loss the insured pays before the insurer pays.

umbrella policy

Personal excess liability insurance that pays above the limits of underlying policies, and sometimes for claims they exclude, after the underlying limits are exhausted.

renter's insurance

A tenant's own policy covering the tenant's belongings and personal liability; a landlord's policy does not cover a tenant's possessions.

National Flood Insurance Program (NFIP)

The federal program that offers flood insurance through FEMA; standard property policies generally exclude flood, and a new NFIP policy generally takes effect 30 days after application and premium payment.

limited liability company (LLC)

A business entity formed under state law that can shield its owners' personal assets from the company's debts and from claims against the company, but not from the owners' own wrongful acts or personal guarantees.

due-on-sale clause

A mortgage provision allowing the lender to demand full repayment if the property is transferred without its consent; a transfer of a mortgaged property into an LLC can trigger it.

CORE IDEAS

The story. Fire was the great terror of colonial cities, where wooden houses stood wall to wall. In 1735 a Philadelphia printer named Benjamin Franklin wrote a letter to his own newspaper urging citizens to guard against fire, and gave the city a proverb: an ounce of prevention is worth a pound of cure. The next year he helped organize the Union Fire Company, volunteers who pledged to bring leather buckets to any member's fire. But buckets could not rebuild a house that burned. So in 1752 Franklin and other leading citizens founded the Philadelphia Contributionship for

the Insurance of Houses from Loss by Fire. Members contributed to a common fund, and when one member's house burned, the fund helped rebuild it. Each insured house carried a lead plaque of four clasped hands on its front wall.

How they figured it out. The Contributionship did not insure blindly. Its surveyors walked through each house, noting brick or wood, the number of stories and the risk next door, and set the premium by what they found — the beginning of rating property by its real risk. Rules followed experience: in the 1780s the company declined to insure houses with trees planted in front, which hampered firefighters, and a rival, the Mutual Assurance Company, was founded in 1784 to insure them and took a green tree as its mark. Two centuries later, protecting owners from lawsuits took a different form. In 1977 Wyoming passed the first American law creating the **limited liability company**; after the IRS agreed in 1988 that such a company could be taxed as a partnership, and the "check-the-box" rules of 1997 made the choice simple, every state adopted LLC statutes. Insurance shares risk; an LLC fences it in.

The big idea. Insurance is a landlord's first line of defense, and it must be the right kind. A homeowner's policy assumes the owner lives in the house; once a tenant moves in, a landlord needs a **dwelling policy** (often called landlord insurance). Common forms are named DP-1 (basic perils, often paid at actual cash value), DP-2 (broader named perils) and DP-3 (open perils on the building, commonly at **replacement cost**). A dwelling policy usually includes coverage for the **dwelling**, **other structures** such as a detached garage, **fair rental value** — rent lost while a covered loss makes the unit unlivable — and **premises liability** for injuries caused by the property's condition. It does *not* cover the tenant's belongings; that is why careful leases require tenants to carry **renter's insurance**. The dwelling limit should match the cost to **rebuild**, not the market price, because the land does not burn. In this example, a 1,600-square-foot house that would cost $210 a square foot to rebuild needs about $336,000 of dwelling coverage even though it sold for $380,000.

Every policy has gaps, and the investor's job is to know them before the loss. **Flood** is excluded from standard policies; flood coverage comes from the **National Flood Insurance Program** or private insurers, and federal rules make a new NFIP policy generally take effect on the 30th day after application and payment — you cannot buy it when the river is already rising. **Earthquake** is also generally excluded and is bought separately, a serious question in the Pacific Northwest. **Sewer and drain backup** often needs an added endorsement. Many dwelling policies restrict coverage

for some losses, such as vandalism, when a property has been **vacant** beyond a stated period, commonly 60 days — read the vacancy clause before a long rehab or turnover. The **deductible** you choose trades premium for risk you keep: a higher deductible lowers the premium but must be backed by cash reserves.

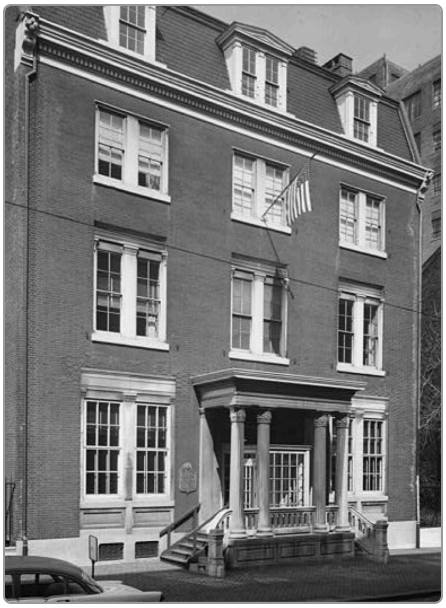
Liability is where landlords can lose far more than a house. A tenant's guest falls on an icy step; a child is hurt on a broken railing. The dwelling policy's liability limit — in this example $500,000 — may not be enough for a serious injury. An **umbrella policy** adds a layer, often $1 million or more, above the limits of the underlying home, auto and landlord policies, and it usually requires those policies to carry minimum limits. In this example, a $1,200,000 judgment is paid $500,000 by the landlord policy and $700,000 by a $1 million umbrella; without the umbrella, the owner would face $700,000 personally. Umbrellas are commonly inexpensive for the first million in this example range, but premiums vary, and the umbrella must list every rental. Insurance is also a matter of prevention, as Franklin knew: handrails, smoke detectors, lighting, prompt repairs and written maintenance records prevent the injuries that become lawsuits.

A **limited liability company** can add a second fence, but it is often oversold. An LLC is created under state law; if a claim arises from the LLC's property and business, the claimant generally reaches the LLC's assets, not the owner's house and savings. But an LLC does *not* protect you from your **own negligence** (if you personally fix the railing badly, you can be sued personally), from loans you **personally guarantee** (most small-investor loans), or from a court that disregards the company because you **commingled** money or ignored formalities. It costs money: formation and annual state fees, sometimes a registered agent, a separate bank account and bookkeeping. For federal income tax, the IRS treats a single-member LLC as a disregarded entity by default, so the rental is still reported on Schedule E. Moving a mortgaged rental into an LLC transfers title and can trigger the **due-on-sale clause**; the federal law that protects certain transfers of homes, such as into a living trust, does not list transfers to an LLC. Ask the lender in writing, check the title insurance, and get advice from a licensed attorney in your state.

Run the numbers. The Rental worksheet's Insurance input should be a landlord-policy quote for the specific property — not a homeowner's quote, a guess or last year's premium — plus flood or earthquake coverage if the property needs it. Get the quote before you make an offer, because in some places insurance has risen faster

than rent. Add an umbrella's yearly premium (or a fair share of it) and any LLC fees to Other expenses ($/mo). Then use the stress test's "Taxes & insurance +20%" row: if a 20% premium increase wipes out the cash flow, the deal has no margin. Classic mistakes: insuring for the purchase price instead of the rebuild cost; skipping loss-of-rents coverage; forgetting that the tenant's belongings are not covered; buying flood insurance too late; and forming an LLC while leaving personal liability insurance thin.

PICTURE STUDY



The Philadelphia Contributionship, 212 South Fourth Street, Philadelphia, Theodore F. Dillon, for the Historic American Buildings Survey, 1958 · Photograph · Library of Congress, Prints and Photographs Division (HABS PA,51-PHILA,141-1)

Image: Wikimedia Commons, public domain

The Historic American Buildings Survey, begun in 1933, sends architects and photographers to document important American buildings, and its records belong to the public. In April 1958 its photographer Theodore F. Dillon recorded the home of the Philadelphia Contributionship, the mutual fire-insurance company Benjamin Franklin helped found in 1752. The company moved into this building, designed by the architect Thomas U. Walter, in the 1830s, and it still insures houses. The picture opens this lesson because the building itself is a kind of promise: neighbors pooling small payments so that one family's disaster does not ruin it.

Look closely

- Look at the brick walls and the slate or tile roof. A fire insurer would notice these first; construction still affects premiums today.
- Find the columned porch over the door. It suggests permanence — an insurer must still exist decades later to pay a claim.
- Count the floors and windows. Surveyors once walked through every room of a house to rate its risk before insuring it.

- Notice the car at the bottom edge. This is a 1958 photograph of a company already more than two centuries old.

Talk about it

1. Why did the Contributionship send surveyors before insuring a house? What would happen to the members if it insured every house at the same price?
2. Which risks of a rental can insurance share, and which can only the owner prevent through care and repairs?
3. Proverbs 22:3 says the prudent man foresees the evil and hides himself. How is buying the right insurance a form of prudence — and how could a person trust insurance in a way that becomes carelessness?

PROJECT

The Protection Plan

You will build a written protection plan for one property in your deal binder: the coverages it needs, the amounts, the gaps, the reserve to back the deductible, and the questions you would bring to an insurance agent and an attorney. With a parent's help, you will read a real declarations page — your family's own homeowner's policy is a fine example — so that the words in this lesson become real.

You will need

- One deal-binder property with its Rental worksheet printout
- A real insurance declarations page, read together with a parent (cover any account numbers)
- FEMA's Flood Map Service Center (msc.fema.gov) and FloodSmart.gov
- The School Launch Deal Analyzer and your notebook

Steps

1. With a parent, read the declarations page. List each coverage, its limit and the deductible, and circle any that a landlord policy would handle differently.
2. For your binder property, estimate rebuild cost (square feet times a rebuild cost per square foot you find from a local builder's published estimate or an example your parent agrees is reasonable) and set the dwelling limit.
3. Compute loss-of-rents coverage for 12 months of rent.
4. Look up the property on FEMA's flood map and record its flood zone. Note whether earthquake coverage would be a question in your region.
5. Choose an umbrella limit and explain your reasoning in two sentences. List what an LLC would and would not protect for this property.
6. Update the Rental worksheet's Insurance input with a realistic landlord-policy figure (plus flood or earthquake if needed), run the stress test and print it.
7. File the plan in your deal binder with a one-paragraph verdict on whether the property still works once it is properly insured: buy, negotiate to a stated

price, or walk away.

INVESTOR'S NOTEBOOK

1. Flashcards: dwelling policy, DP-1/DP-2/DP-3, replacement cost, actual cash value, fair rental value, premises liability, deductible, umbrella, renter's insurance, NFIP, LLC, due-on-sale clause.
2. Draw a layer cake of protection from bottom to top: prevention (repairs, railings, detectors) → landlord policy → umbrella → LLC → reserves, with one sentence beside each layer on what it does.
3. Trap list: homeowner's ≠ landlord policy · insure the REBUILD, not the price · flood and earthquake are separate · tenant's stuff = tenant's policy · an LLC doesn't cover YOUR negligence or YOUR guarantee · retitling can trigger due-on-sale.

KEY FORMULAS

$$\text{Dwelling coverage} \approx \text{square feet} \times \text{rebuild cost per square foot}$$

$$\text{Loss-of-rents need} = \text{monthly rent} \times \text{months to rebuild}$$

$$\text{Umbrella pays} = \min(\text{claim} - \text{underlying limit},\ \text{umbrella limit})$$

$$\text{Deductible break-even (years)} = \frac{\text{added deductible}}{\text{yearly premium saved}}$$

From history. Fire marks like the Contributionship's four clasped hands were more than advertising. In early cities, volunteer fire companies competed with one another, and a mark on the wall told everyone which insurer stood behind the house. The custom spread to many American cities, and collectors now prize the old cast-iron and lead plaques. The Contributionship itself has insured Philadelphia houses continuously since 1752 and is often described as the oldest property insurance company in the United States.

WORKED EXAMPLES

Example 1. In this example, a rental sells for $380,000. It has 1,600 square feet, and the insurer's estimator says rebuilding would cost about $210 a square foot. Rent is $2,200 a month, and a serious fire could take 5 months to rebuild. How much dwelling and fair-rental-value coverage does the owner need?

Show solution

1. Dwelling: $1{,}600 \times \$210 = \$336{,}000$ — the cost to rebuild, not the $380,000 market price, which includes land and location.
2. Loss of rents: $\$2{,}200 \times 5 = \$11{,}000$ at minimum.
3. Because rebuilding can run long, a limit of 12 months of rent ($\$2{,}200 \times 12 = \$26{,}400$) gives a margin.
4. Check: replacement-cost coverage (common on DP-3) avoids a deduction for the house's age.

Answer: About $336,000 of dwelling coverage at replacement cost, and fair-rental-value coverage of at least $11,000, preferably about 12 months of rent.

Example 2. In this example, a visitor is badly injured on a rental's stairs and wins a judgment of $1,200,000. The landlord policy's liability limit is $500,000, and the owner carries a $1,000,000 umbrella. Who pays what? What if there were no umbrella?

Show solution

1. Underlying policy pays first, up to its limit: $500,000.
2. Umbrella pays the excess, up to its limit: $\min(\$1{,}200{,}000 - \$500{,}000,\ \$1{,}000{,}000) = \$700{,}000$.
3. Owner pays: $\$1{,}200{,}000 - \$500{,}000 - \$700{,}000 = \$0$.
4. Without the umbrella, the owner is exposed to $700,000 — and an LLC would not protect him if a court found his own negligence caused the injury.

Answer: The landlord policy pays $500,000 and the umbrella $700,000; the owner pays nothing. Without the umbrella he could owe $700,000 personally.

Example 3. In this example, raising a landlord policy's deductible from $1,000 to $2,500 lowers the premium from $1,450 to $1,270 a year. The owner has filed one claim in 12 years. Should she raise it, and what changes in the Rental worksheet?

Show solution

1. Premium saved: $\$1{,}450 - \$1{,}270 = \$180$ a year. Added risk per claim: $\$2{,}500 - \$1{,}000 = \$1{,}500$.
2. Break-even: $\$1{,}500 \div \$180 \approx 8.3$ years between claims.
3. Her history (one claim in 12 years) is longer than 8.3 years, so the higher deductible likely saves money — if her reserves can absorb $2,500 at once.
4. In the Rental worksheet, change Insurance from $1,450 to $1,270 a year; cash flow rises $15 a month, and her reserve target should include the larger deductible.

Answer: Raise the deductible if reserves cover $2,500; she saves $180 a year and breaks even if claims come less often than about every 8 years.

PRACTICE

1. Easy Why isn't a homeowner's policy enough once a house is rented to a tenant?

   Show answer

   A homeowner's policy is written for an owner-occupied home; a rental needs a dwelling (landlord) policy that covers the building, loss of rents and premises liability for a property occupied by tenants. The insurer must be told the use has changed.

2. Easy Does a landlord's policy cover the tenant's furniture and clothes after a fire?

   Show answer

   No. The tenant's belongings are covered only by the tenant's own renter's insurance, which is why many leases require it.

3. **Easy** How long after application and payment does a new NFIP flood policy generally take effect?

   Show answer

   On the 30th day, under federal rules (with certain exceptions, such as policies bought in connection with a loan closing). It cannot be bought at the last minute.

4. **Medium** In this example, a 2,100-square-foot rental would cost $190 a square foot to rebuild. What dwelling limit fits, and why not use the $450,000 market price?

   Show answer

   $2{,}100 \times \$190 = \$399{,}000$. The market price includes land and location, which a fire does not destroy; insurance should cover the rebuild cost.

5. **Medium** In this example, a fourplex rents for $1,150 a unit. A fire closes two units for 6 months. What rent is lost, and what coverage replaces it?

   Show answer

   $2 \times \$1{,}150 \times 6 = \$13{,}800$, replaced by fair rental value (loss of rents) coverage up to its limit.

6. **Medium** A judgment of $650,000 is entered; the landlord policy's limit is $300,000 and the umbrella is $1,000,000. Who pays what?

   Show answer

   Landlord policy $300,000; umbrella $350,000; owner $0.

7. **Medium** Name three things an LLC does not protect a landlord from.

   Show answer

   Her own negligence, loans she personally guaranteed, and claims if a court disregards the LLC because she commingled funds or ignored the company's separateness. (Also: it does not replace insurance.)

8. Hard A deductible increase from $500 to $2,000 saves $210 a year. Find the break-even, and state what else must be true before choosing it.

Show answer

$1,500 ÷ $210 ≈ 7.1 years. The owner must have reserves to pay $2,000 at once, and her claim history should suggest claims less often than about every 7 years.

9. Hard An investor plans a four-month gut rehab of a vacant house. What insurance question must he ask before starting?

Show answer

Whether his policy limits coverage while the house is vacant or under renovation — many dwelling policies restrict some losses after a stated vacancy period, commonly 60 days — and whether he needs a vacant-property or builder's-risk policy for the rehab.

10. Hard In this example, a landlord's insurance is $1,500 a year and taxes $3,000. The stress test raises both 20%. By how much does yearly cash flow fall?

Show answer

$0.20 \times (\$1{,}500 + \$3{,}000) = \$900$ a year, or $75 a month.

11. Challenge A seminar speaker says, "Put every property in its own LLC and you can't be sued." Write a three-sentence correction.

Show answer

An LLC can keep claims arising from one property away from the owner's other assets, but it does not protect an owner from her own negligence or from loans she personally guaranteed, and a court can disregard an LLC whose owner mixes funds. Retitling mortgaged properties into LLCs can trigger due-on-sale clauses and adds fees and paperwork for each entity. Adequate liability insurance and an umbrella are the first defense, and the entity decision belongs with a licensed attorney.

12. **Challenge** A landlord's premium jumps from $1,300 to $2,100 at renewal on a house that produced $1,800 of yearly cash flow. Analyze the effect and list two responses.

Show answer

Cash flow falls by $800 to $1,000 a year ($83 a month). Responses: shop several insurers through an independent agent; raise the deductible if reserves allow; fix risk items an insurer flags (old roof, wiring); and rerun the deal — a property with little margin may need a rent review at renewal or may be a candidate to sell.

COMMON MISTAKES

- Keeping a homeowner's policy on a rental. Tell the insurer and buy a dwelling (landlord) policy once tenants live there.
- Insuring for the purchase price or assessed value. Insure for the cost to rebuild; the land does not burn.
- Assuming flood and earthquake are covered. Both are generally excluded and bought separately, and a new NFIP policy generally waits 30 days.
- Skipping loss-of-rents coverage. Without it, the mortgage keeps coming due while the rent stops.
- Believing an LLC replaces insurance. An LLC does not protect against your own negligence or personal guarantees, and it fails if you commingle funds.
- Deeding a mortgaged property to an LLC without asking the lender. The transfer can trigger the due-on-sale clause.

> **Make it a game · Who Pays?.** Make 20 disaster cards: "kitchen fire," "tenant's laptop stolen," "river flood," "guest slips on ice," "sewer backs up," "roof wears out," "earthquake cracks the foundation," "pipe bursts in a vacant house after 90 days." Make answer cards: LANDLORD POLICY, RENTER'S POLICY, FLOOD POLICY, EARTHQUAKE COVERAGE, UMBRELLA, ENDORSEMENT NEEDED, OWNER'S RESERVES. Flip a disaster; players race to slap the right answer card and explain why. Correct answers score 2; a wrong slap loses 1. Debate the hard ones, then check the lesson.

> **Scripture.** “A prudent man foreseeth the evil, and hideth himself: but the simple pass on, and are punished.” (Proverbs 22:3, KJV)
>
> The prudent man does not pretend storms, fires and lawsuits will never come; he sees them in advance and takes shelter. For a landlord that shelter includes careful repairs, the right insurance and honest reserves. The verse also guards against a false shelter: the prudent person studies what a policy or an LLC really covers instead of trusting a promise he has not read.

9.5 Bookkeeping for Landlords

OBJECTIVES

- Set up a landlord's books: a separate bank account, a chart of accounts matched to the Schedule E lines, a rent roll and a system for receipts and mileage.
- Record transactions correctly, splitting mortgage payments into interest and principal and treating security deposits as money held for tenants rather than income.
- Separate capital improvements and the CapEx reserve from ordinary expenses and keep basis records for the life of the property.
- Prepare a monthly owner statement showing income, operating expenses, NOI, debt service, cash flow and reserve transfers.
- Compare a year of actual results with the original Deal Analyzer pro forma, explain each variance and update next year's assumptions.

> **Warm-up.** Find any receipt in your house — groceries, gas, a hardware store. In five minutes, write down what a stranger could learn from it: the date, the seller, what was bought and the amount. Then write one sentence: if that receipt were for a repair on a rental, why might it matter ten years from now?

WATCH

Rental Property Bookkeeping

The DIY Landlord · 16:31

https://www.youtube.com/watch?v=M92hssH29Mk

> **WHEN TO WATCH**
> Watch after the fourth core idea; as he works through the Schedule E categories on paper, build your own chart of accounts in your notebook, one line per category, with one example expense beside each.

BACKUP VIDEO

Rental Property Income & Expense Tracking Template For Real Estate Investors (Landlords)

Money and Life TV · 25:11

https://www.youtube.com/watch?v=K714oNhmvwA

Watch 0:50–14:00 while building your spreadsheet; copy only the structure — a ledger, monthly totals by category and a summary — and adapt the categories to the Schedule E list.

KEY TERMS

chart of accounts

The list of categories used to record a business's income, expenses, assets and liabilities; for a landlord it usually follows the Schedule E lines.

ledger

The running record of every transaction, with its date, payee or payer, category, amount and a link to its receipt.

rent roll

A table of every unit showing the tenant, lease dates, monthly rent, deposit held, amount due, amount paid and balance.

security deposit liability

Money held for a tenant under the lease and state law; it is not income when received and must be tracked as owed back to the tenant unless lawfully applied.

cash method

An accounting method that records income when received and expenses when paid; most individual landlords use it.

bank reconciliation

The monthly check that the ledger's balance agrees with the bank statement, with every difference explained.

variance

The difference between an actual result and the budgeted or projected amount, usually shown in dollars and percent.

owner statement

A monthly report of a property's income, expenses, net operating income, debt service, cash flow and reserve balances.

pro forma

A projected income-and-expense statement for a property, such as the printed Deal Analyzer worksheet made before purchase.

basis records

The purchase documents, improvement receipts and depreciation schedules needed to figure depreciation and gain; kept for as long as the property is owned and for the limitation period after the year it is sold.

CORE IDEAS

The story. When the merchant Francesco Datini of Prato died in 1410, he left his great fortune to the poor of his town — and he left something else almost no one noticed. In 1870, workers found sacks of papers stored under a staircase of his house: about 150,000 letters and some 500 account books and ledgers from a lifetime of trade in cloth, wool and goods across Italy, France and Spain. Many of the ledgers were headed with the words "In the name of God and of profit." Historians have mined them ever since, because Datini recorded nearly everything — what he bought, what he sold, what his agents owed, what each house and shop cost him. He was a demanding, worried man, but his records were honest and complete, and six centuries later anyone can still see exactly how his business worked.

How they figured it out. Merchants in Italian cities like Datini's developed **double-entry bookkeeping**: every transaction is recorded twice, as a debit to one account and a credit to another, so the books must balance and errors show themselves. In 1494 a Franciscan friar and mathematician, Luca Pacioli, published the method in

Venice inside his great textbook of arithmetic, and it spread across Europe. A small landlord does not need full double-entry books, but he needs the same discipline. The IRS requires taxpayers to keep records that support the income and deductions on their returns, and records of a property's basis must be kept as long as the property is owned and for years after it is sold. A tidy ledger is also how a landlord learns whether the deal is doing what the pro forma promised.

The big idea. Good bookkeeping begins with **separation**. Every rental business needs its own checking account — rent comes in, expenses go out, and personal spending never touches it. Next comes a **chart of accounts** built on the Schedule E lines you met in Lesson 9.1: rents received; advertising; auto and travel; cleaning and maintenance; commissions; insurance; legal and professional fees; management fees; mortgage interest; other interest; repairs; supplies; taxes; utilities; and other. Then add the accounts that are *not* expenses: loan principal, **capital improvements** (tracked for depreciation and basis), the **CapEx reserve** (savings set aside) and **security deposits held**. Each transaction gets a date, a payee, a category, an amount and a receipt — photographed and filed the day it happens. Most individual landlords use the **cash method**: income when received, expenses when paid.

Four entries trip up beginners. First, a **mortgage payment** must be split: interest is an expense; principal reduces the loan; and if the payment includes escrow for taxes and insurance, that part is recorded when the lender actually pays the bill. In this example, a $1,320 payment is $1,005 interest and $315 principal. Second, a **security deposit** is not income; it is money held for the tenant, often under state rules about where it is kept and when it must be returned, and only an amount lawfully kept becomes income. Third, **advance rent** is income when received. Fourth, a **capital improvement** — a new water heater, a new roof — goes to an improvement account with its date and cost, because it is depreciated and it raises basis for the day you sell. Alongside the ledger, keep a **rent roll** listing each unit, tenant, lease dates, rent, deposit held, amount due, amount paid and balance, and a **mileage log** with date, purpose and miles for every trip to the property.

Set a **monthly close** and keep it like an appointment. Download the bank statement and **reconcile** it to the ledger. Categorize every transaction and attach its receipt. Update the rent roll, and send any late notice exactly as the lease and state law require. Transfer the month's reserve savings — in this course, the repairs and CapEx

percentages from your pro forma — into a separate reserve account. Then prepare an **owner statement**: income, operating expenses by category, net operating income, debt service split into interest and principal, cash flow and the reserve balance. Once a year, close the books for Schedule E, update the depreciation schedule and file the year's records together. A landlord with a property manager still keeps these books in summary and reads the manager's monthly statement line by line; a manager's report is not a substitute for the owner's attention.

The most valuable report of all is the **annual review**. Pull the printed Deal Analyzer worksheet from your deal binder — your pro forma from before you bought — and compare every line with the year's actual results. Compute each **variance** in dollars and as a percent of gross scheduled income. Was vacancy better or worse? Did repairs run 9% instead of 6%? Did taxes jump after reassessment? Then update next year's assumptions to match reality, and decide what to do: raise the rent at renewal within the law, shop the insurance, fix a recurring problem, or, if the property simply does not perform, consider selling. Honesty here is not a formality. Jesus said that he who is faithful in that which is least is faithful also in much; a landlord who records every small receipt truthfully — and never mixes personal spending into the business or inflates an expense — is building the character that larger stewardship requires.

Run the numbers. Your books are where the Deal Analyzer's guesses become facts. Each year, put your actual figures back into the Rental worksheet — real taxes, the real insurance premium, actual repairs and vacancy as percents of gross scheduled income — and see what the property really earns. Add the cost of your own bookkeeping time or software to Other expenses if you pay for it. Remember how the analyzer's categories map to Schedule E: repairs and utilities match closely, but the analyzer's CapEx line is a *reserve*, not a deduction, and its debt service includes principal, which Schedule E never deducts. Common mistakes: counting the whole mortgage payment as an expense; recording a security deposit as income; burying a new roof in "repairs"; paying a personal bill from the rental account; and never comparing actual results with the pro forma, so the same expensive surprise repeats every year.

PICTURE STUDY



Portrait of a Merchant, Jan Gossaert, c. 1530 · Oil on panel · National Gallery of Art, Washington

Image: Wikimedia Commons, public domain

Jan Gossaert (about 1478–1532) was a Netherlandish painter who traveled to Rome and brought Italian ideas home to Flanders, yet kept the Flemish love of exact detail. In this portrait an unnamed merchant pauses in the middle of writing in his ledger. The two bundles behind him carry labels in old Dutch meaning “miscellaneous letters” and “miscellaneous drafts” — his correspondence and his rough copies, kept on file. Every object on his table is a tool of honest record-keeping, which is why he opens a lesson on landlords’ books.

Look closely

- Find the quill and the open ledger. He is writing an entry as it happens, not trying to remember it at the end of the year.
- Look at the bundles of papers on the wall. Filed letters and drafts were his “receipts” — evidence he could produce if a question arose.
- Find the coins and the little balance. Merchants weighed coins because clipped or light coins were common; checking the amount is part of bookkeeping too.
- Look at his face. Gossaert painted a careful, watchful man — the kind of attention a landlord’s monthly close requires.

Talk about it

1. What would happen to this merchant's business if he stopped writing in his ledger for six months?
2. Which of the objects on his table has a modern equivalent in a landlord's bookkeeping system (bank statement, receipt photo, spreadsheet, rent roll)?
3. Luke 16:10 says that he who is faithful in that which is least is faithful also in much. How does honesty about small entries in a ledger prepare a person for larger trust?

PROJECT

Three Months of Books

You will keep three months of pretend books for one property from your deal binder. Using its Rental worksheet as the pro forma, you will invent realistic transactions — rent, a late payment, a repair, a utility bill, a new tenant's deposit, one capital improvement — record them in a spreadsheet ledger organized by Schedule E categories, keep a rent roll, and prepare a monthly owner statement for each month and a three-month comparison with the pro forma.

You will need

- One deal-binder property with its printed Rental worksheet
- A spreadsheet with tabs named Ledger, Rent Roll, Owner Statements and Pro Forma Comparison
- IRS Schedule E line list (from Lesson 9.1 or the instructions at irs.gov)
- Your notebook for the monthly close checklist

Steps

1. Build the chart of accounts: every Schedule E line, plus Loan Principal, Capital Improvements, CapEx Reserve and Security Deposits Held.
2. Set up the Ledger tab with columns for date, payee or payer, description, category, amount in, amount out, and receipt file name.
3. Enter three months of pretend transactions (at least 25), including one late rent payment, one repair, one supply purchase, one utility bill, the monthly mortgage split into interest and principal, one security deposit and one capital improvement.
4. Keep the Rent Roll tab current each month: tenant, lease dates, rent, deposit held, due, paid, balance.
5. At the end of each month, write a short close checklist (reconcile, categorize, rent roll, reserve transfer) and prepare an owner statement: income, expenses by category, NOI, interest, principal, cash flow, reserve transfer.

6. On the Pro Forma Comparison tab, compare three months of actuals with one quarter of the Rental worksheet's projections and compute each variance.
7. Print the statements and comparison, file them in your deal binder, and write a one-paragraph verdict: is the property performing as projected, and what one input would you change in the Rental worksheet?

INVESTOR'S NOTEBOOK

1. Flashcards: chart of accounts, rent roll, ledger, security deposit liability, cash method, owner statement, bank reconciliation, pro forma, variance, basis records.
2. Draw the monthly close as a circle of five steps: reconcile → categorize → rent roll → reserve transfer → owner statement, with the date of the month you will do it.
3. Trap list: principal is not an expense · deposits are not income · improvements are not repairs · the CapEx reserve is savings, not a deduction · never pay a personal bill from the rental account.

KEY FORMULAS

$$\text{NOI (month)} = \text{income collected} - \text{operating expenses paid}$$
$$\text{Cash flow} = \text{NOI} - (\text{interest} + \text{principal})$$
$$\text{Schedule E net (before depreciation)} = \text{income} - \text{operating expenses} - \text{interest}$$
$$\text{Variance} = \text{actual} - \text{pro forma}; \quad \text{as \% of GSI} = \frac{\text{amount}}{\text{GSI}} \times 100\%$$

From history. Luca Pacioli's 1494 book was not mainly about accounting; it was a giant textbook of arithmetic, geometry and proportion, and its bookkeeping section was only one part. He did not invent double entry — Italian merchants had used it for generations — but by printing it he made it teachable everywhere. He described the merchant's inventory, memorandum book, journal and ledger — the same path from first rough note to final account that a landlord follows today from receipt photo to ledger line to Schedule E.

Example 1. Categorize each March transaction for a single-family rental: (1) rent $1,850; (2) pet rent $35; (3) mortgage payment $1,320 ($1,005 interest, $315 principal); (4) plumber to clear a drain $185; (5) furnace filters and bulbs $42; (6) city water and sewer $68; (7) a new tenant's security deposit $1,850; (8) a new water heater $1,450; (9) a rental-listing fee $25.

Show solution

1. (1) and (2): Rents received — income.
2. (3): $1,005 to Mortgage interest; $315 to the loan balance — not an expense.
3. (4) Repairs. (5) Supplies. (6) Utilities. (9) Advertising.
4. (7): Security deposits held — a liability owed to the tenant, kept as state law requires; not income.
5. (8): Capital improvement — record the date and cost for depreciation and basis (ask a tax professional whether an IRS safe harbor applies).

Answer: Income $1,885; deductible operating expenses $\$185 + \$42 + \$68 + \$25 = \$320$ plus $1,005 interest; the principal, the deposit and the water heater are recorded but not expensed.

Example 2. Using March's ordinary transactions above but leaving out the one-time listing fee and the water heater (paid from the reserve), prepare the owner statement. Her pro forma sets aside 7% of rent for CapEx.

Show solution

1. Income collected: $\$1,850 + \$35 = \$1,885$.
2. Operating expenses: $\$185 + \$42 + \$68 = \$295$. NOI: $\$1,885 - \$295 = \$1,590$.
3. Debt service: $1,320. Cash flow: $\$1,590 - \$1,320 = \$270$.
4. CapEx reserve transfer: $0.07 \times \$1,885 \approx \$132$. Cash left after the transfer: $\$270 - \$132 = \$138$.
5. Tax view for the month, before depreciation: $\$1,885 - \$295 - \$1,005 = \$585$.

Answer: NOI $1,590; cash flow $270; $132 to the CapEx reserve; $138 left. The statement shows both the operating picture and the cash picture.

Example 3. In this example, her pro forma (Rental worksheet, self-managed) projected: rent $1,850 a month (GSI $22,200), vacancy 6%, taxes $2,700, insurance $1,380, owner-paid water $68 a month, repairs 6%, CapEx 7%. The year's actuals: rent collected $21,275 plus $420 pet rent, taxes $2,760, insurance $1,380, water $851, repairs $2,140, and the 7% CapEx reserve set aside as planned. Compare NOI and find the biggest variance.

Show solution

1. Pro forma: EGI $\$22{,}200 \times 0.94 = \$20{,}868$; expenses $\$2{,}700 + \$1{,}380 + \$816 + \$1{,}332 + \$1{,}554 = \$7{,}782$; NOI $13,086.
2. Actual: income $\$21{,}275 + \$420 = \$21{,}695$; expenses $\$2{,}760 + \$1{,}380 + \$851 + \$2{,}140 + \$1{,}554 = \$8{,}685$; NOI $13,010.
3. NOI variance: $\$13{,}010 - \$13{,}086 = -\$76$ — nearly on target overall.
4. Repairs variance: $\$2{,}140 - \$1{,}332 = +\$808$; actual repairs were $\$2{,}140 \div \$22{,}200 \approx 9.6\%$ of GSI, not 6%. Income beat the projection by $\$21{,}695 - \$20{,}868 = \$827$ (shorter vacancy plus pet rent).

Answer: NOI missed by only $76, but only because better occupancy covered repairs that ran about 9.6% instead of 6%. Next year's Rental worksheet should use repairs near 9–10% unless she fixes the cause.

PRACTICE

1. Easy Why should a rental have its own bank account?

   Show answer

   Separation makes the records clear and provable, prevents personal spending from mixing with business money, and supports any liability protection the owner has arranged.

2. Easy Is a tenant's security deposit income when received? Explain.

   Show answer

   No. It is held for the tenant and owed back under the lease and state law; only an amount lawfully kept (for damage or unpaid rent) becomes income, in the year it is kept.

3. **Easy** List five columns a rent roll should have.

Show answer

Any five of: unit, tenant, lease start, lease end, monthly rent, deposit held, amount due, amount paid, balance.

4. **Medium** A mortgage payment of $1,480 includes $310 of escrow, $880 of interest and the rest principal. How much is principal, and how are the parts recorded?

Show answer

Principal $= \$1{,}480 - \$310 - \$880 = \$290$. Interest is an expense; principal reduces the loan; escrow is recorded as taxes and insurance when the lender pays those bills.

5. **Medium** In this example, a month's income is $2,150, operating expenses $540 and the loan payment $1,390. Find NOI and cash flow.

Show answer

NOI $\$2{,}150 - \$540 = \$1{,}610$; cash flow $\$1{,}610 - \$1{,}390 = \$220$.

6. **Medium** Classify: (a) a $60 online listing fee; (b) $400 to a tax preparer for Schedule E; (c) $9,000 new furnace; (d) $75 lawn service.

Show answer

(a) Advertising. (b) Legal and other professional fees. (c) Capital improvement, depreciated. (d) Cleaning and maintenance (or Other, if you track lawn care separately).

7. **Medium** Why record the date and cost of every capital improvement and keep the records after the property is sold?

Show answer

Improvements are depreciated and added to basis; you need them to figure depreciation each year and gain at sale, and the IRS can examine a return for a period after the sale, so basis records are kept for the limitation period after the year of sale.

8. Hard Projected repairs at 6% of a $27,600 GSI; actual repairs $2,700. Find the variance in dollars and as a percent of GSI, and the actual repairs percent.

Show answer

Projected $1,656; variance $1,044 (3.8% of GSI); actual repairs $2,700 ÷ $27,600 ≈ 9.8%.

9. Hard A landlord pays his own car insurance from the rental account "just this once" and records it as rental insurance. What two problems has he created?

Show answer

He has commingled personal and business money, weakening his records and any LLC protection, and he has recorded a false deduction on Schedule E. He should reverse the entry, repay the account and keep personal bills out of it.

10. Hard A property's owner statement shows positive cash flow every month, but the CapEx reserve balance is zero after two years. What is wrong?

Show answer

The owner has not been transferring the reserve each month, so the "cash flow" is overstated; when the roof or furnace fails, there will be no money. The statement should show the reserve transfer and the reserve balance.

11. Challenge In this example, pro forma vacancy was 6% of a $24,000 GSI; actual rent collected was $21,600. Find actual vacancy and credit loss as a percent and the variance in dollars. Suggest two causes to investigate.

Show answer

Loss = $24,000 − $21,600 = $2,400 = 10% of GSI, versus $1,440 (6%) projected — a variance of $960. Investigate turnover time between tenants (slow make-ready or overpriced rent) and nonpayment (screening, collection process).

12. Challenge Write a three-sentence explanation, for a younger sibling, of why honest books matter even when no one is checking.

Show answer

Books tell the truth about whether the rental is working, and false entries only fool the owner first. Taxes, tenants' deposits and lenders all depend on records that are true. And being faithful with small numbers when no one is watching is how a person becomes trustworthy with large ones.

COMMON MISTAKES

- Recording the whole mortgage payment as an expense. Split it: interest is an expense; principal reduces the loan; escrow is recorded when taxes and insurance are paid.
- Recording security deposits as income. They are held for tenants and are income only when lawfully kept.
- Putting capital improvements in "repairs." Track them separately for depreciation and basis.
- Treating the CapEx reserve as already spent or as a deduction. It is savings until used.
- Mixing personal and rental money. Commingling weakens records and any entity protection.
- Never comparing actuals with the pro forma. Without an annual review, the same bad assumption repeats every year.

Make it a game · Ledger Relay. Write 24 transaction cards: "rent $1,850," "mortgage $1,320 — $1,005 interest," "plumber $185," "security deposit $1,850," "new water heater $1,450," "late fee $50," "paint between tenants $300." Lay out category cards in a row: Income, each Schedule E expense, Principal, Improvement, Deposit Held. Teams take turns drawing a card and running it to the right category; a split card (like a mortgage payment) must be split correctly. One point per card, two for a correct split, and the team that totals its column first at the end gets a bonus point.

Scripture. "He that is faithful in that which is least is faithful also in much: and he that is unjust in the least is unjust also in much." (Luke 16:10, KJV)

Jesus spoke these words in a parable about a steward and his master's accounts. Bookkeeping is a daily test of faithfulness in small things — the forty-two-dollar receipt, the deposit that is not yet income, the personal bill that must not be paid from the business account. The habit of honest small entries is how a person becomes trustworthy with much.

UNIT 9

Taxes, Insurance and Protection

Picture the day you sell a rental you have owned for ten years. The buyer's check looks enormous — until you subtract the loan, the commissions and a tax bill built partly from deductions you took years ago. Or picture the night a pipe bursts, or a guest falls on the stairs. This unit is about the parts of real estate investing that do not show up in a listing: the tax code, the insurance policy and the records that hold everything together. You will learn how **depreciation** lets a cash-flowing rental show a loss on **Schedule E**, why land is never depreciated, and how to tell a **repair** from a **capital improvement**. You will follow a sale from **amount realized** to **adjusted basis** to gain, see why depreciation comes back as **unrecaptured Section 1250 gain**, and learn exactly what the **Section 121** home-sale exclusion does — and does not do — for a house hacker.

Then you will trace a **1031 exchange** on a calendar, with its 45-day and 180-day deadlines and the **boot** that makes part of the gain taxable; insure a rental for what it costs to rebuild; layer an **umbrella** policy over a **landlord policy**; and weigh honestly what a **limited liability company** can and cannot protect. You will finish by keeping a landlord's books for three months. Taxes are taught here as education, not advice: every rule is checked against IRS publications, current rates are left to the current year's instructions, and real decisions belong with a CPA, an insurance agent and an attorney.

PREREQUISITES

- Can complete a Rental worksheet in the Deal Analyzer and explain NOI, debt service, cash flow and the CapEx reserve (Unit 3)
- Can find a property's assessed land and improvement values on a county assessor's website (Unit 2)
- Can read an amortization table and split a mortgage payment into interest and principal (Unit 4)
- Has a deal binder with at least ten analyzed properties, including one house hack (Unit 5)

MASTERY CHECKLIST

- ☐ I can allocate a rental's basis between land and building and compute full-year and first-year depreciation over 27.5 years.
- ☐ I can classify spending as a repair or a capital improvement using the betterment, restoration and adaptation tests.
- ☐ I can compute a rental's taxable income and reconcile it with cash flow, and explain the passive activity rules and the $25,000 allowance in outline.
- ☐ I can compute amount realized, adjusted basis and gain on a sale, and split the gain into unrecaptured Section 1250 gain and long-term capital gain.
- ☐ I can apply the Section 121 ownership, use and look-back tests, including to a duplex house hack and a former home that became a rental.
- ☐ I can lay out a 1031 exchange calendar and compute boot, recognized gain, deferred gain and replacement basis.
- ☐ I can choose dwelling and loss-of-rents coverage amounts, explain umbrella layering and state what an LLC can and cannot protect.

- ☐ I can keep a landlord's ledger and rent roll, prepare a monthly owner statement and compare a year's actual results with the pro forma.

OPTIONAL BOOKS AND RESOURCES FOR THIS UNIT

- **School Launch Deal Analyzer**: Free. The Rental worksheet gives the cash view of every property in this unit; you build the tax view beside it, update the Insurance input with real landlord quotes and use the stress test's taxes-and-insurance row. Ages 14 and up.
- **IRS Publication 527, Residential Rental Property**: Free, official. The IRS's own guide to rental income, expenses, repairs versus improvements, depreciation (with Table 2-2d) and the passive activity rules. Use it with Lessons 9.1 and 9.5, and check the current year's edition. Ages 15 and up.
- **IRS Publication 544, Sales and Other Dispositions of Assets**: Free, official. Explains gain, adjusted basis, depreciation recapture and like-kind exchanges, including the 45- and 180-day rules and boot. Read the like-kind exchange section with Lesson 9.3; pair it with Publication 523, Selling Your Home, for Lesson 9.2. Ages 15 and up.
- **FloodSmart (National Flood Insurance Program)**: Free, official. FEMA's consumer site for flood insurance: what standard policies leave out, how flood coverage works and how to find a property's flood risk. Use it in the Lesson 9.4 project. Ages 14 and up.
- **Amanda Han and Matthew MacFarland, The Book on Tax Strategies for the Savvy Real Estate Investor (BiggerPockets Publishing)**: Optional book by two CPAs who invest in real estate. A readable tour of depreciation, exchanges and record-keeping for small investors; read it alongside the IRS publications, because tax law changes after any book is printed. Ages 16 and up.

Not required. Every project in this unit works without them. School Launch has no ties to these authors, publishers or companies.

LESSONS IN THIS UNIT

9.1 Depreciation and the Rental Tax Return — 3 sessions of 50 minutes

9.2 Selling: Capital Gains, Recapture and the Home-Sale Exclusion

3 sessions of 50 minutes

9.3	**The 1031 Exchange**	3 sessions of 50 minutes
9.4	**Insurance, Umbrellas and LLCs**	3 sessions of 50 minutes
9.5	**Bookkeeping for Landlords**	3 sessions of 50 minutes

Unit 9 test

Closed notes; a basic calculator is allowed. Twenty four-choice questions, 5 points each, about two minutes per question — set a timer for 40 minutes. Show the arithmetic for every calculation question on scratch paper, choose the best answer, then check your work against the key. Aim for 80% or better, and rework every miss in your investor's notebook. Figures marked "in this example" are examples, not current rates, prices or rules.

1. **5 pts**

   In this example, a rental's total basis is $330,000, and the assessor's values put 20% in land. What is the full-year depreciation?

   A. $12,000

   B. $9,600

   C. $6,769

   D. $8,800

2. **5 pts**

   Which of these is a deductible repair rather than a capital improvement?

   A. Replacing the entire roof

   B. Adding a deck

   C. Repainting a bedroom between tenants

   D. Converting the garage into a studio

3. 5 pts

A landlord’s monthly mortgage payment is $1,600, of which $1,250 is interest and $350 principal. What may be deducted on Schedule E for the year?

A. $15,000 of interest

B. $19,200, the full payments

C. $4,200 of principal

D. Nothing; mortgage payments are personal

4. 5 pts

An owner who actively participates has a $12,000 rental loss and modified adjusted gross income of $130,000. Under the rule in Publication 527, how much of the special allowance is available?

A. $25,000

B. $0

C. $15,000

D. $10,000

5. 5 pts

In this example, a rental collects $24,000, pays $8,000 of operating expenses, $12,000 of mortgage interest and $2,500 of principal, and has $7,000 of depreciation. What is its taxable income?

A. $1,500

B. −$5,500

C. −$3,000

D. $4,000

6. 5 pts

In this example, a rental’s cost basis is $250,000, improvements total $15,000 and depreciation allowed is $50,000. It sells for $360,000 with $25,000 of selling costs. What is the gain?

A. $120,000

B. $95,000

C. $110,000

D. $145,000

7. 5 pts

Which seller meets the Section 121 ownership and use tests?

A. Owned 4 years, rented it out the whole time, never lived there

B. Owned and lived there 20 months, sold for no special reason

C. Lived there 3 years as a tenant, then bought it and sold 6 months later

D. Owned 5 years, lived there the first 3, rented it 2, then sold

8. 5 pts

A couple lived in one unit of a duplex and rented the other, then sold after 3 years. Which part of the gain can generally be excluded under Section 121?

A. All of it, because they lived on the property

B. The gain on their own unit only

C. None of it, because the building had a rental

D. Only the depreciation on the rented unit

9. 5 pts

In this example, a rental sells at a $140,000 gain after $45,000 of straight-line depreciation. How is the gain divided?

A. $45,000 unrecaptured Section 1250 gain and $95,000 long-term capital gain

B. $140,000 long-term capital gain

C. $95,000 unrecaptured Section 1250 gain and $45,000 long-term capital gain

D. $140,000 ordinary income

10. 5 pts

A homeowner rented out her basement for several years and claimed depreciation on it. When she sells and qualifies for Section 121, what happens to that depreciation?

A. It is excluded with the rest of the gain

B. It increases her basis

C. It cannot be excluded and is taxed

D. It is ignored because the basement was inside the home

11. 5 pts

A rental sale closes October 20, 2026, starting a 1031 exchange. Day 180 is April 18, 2027, and the owner's tax return for 2026 is due April 15, 2027. She does not extend the return. When must she receive the replacement property?

A. April 18, 2027

B. December 4, 2026

C. October 20, 2027

D. April 15, 2027

12. 5 pts

In an exchange with $200,000 of realized gain, the investor receives $30,000 of cash at closing and no other boot. How much gain is recognized?

A. $0

B. $30,000

C. $170,000

D. $200,000

13. 5 pts

Which property cannot be exchanged under Section 1031?

A. A house bought, renovated and resold within six months as a flip

B. A rental house traded for a vacant lot held for investment

C. A duplex traded for a small office building

D. A farm traded for a city fourplex

14. 5 pts

In this example, a replacement property costs $500,000 and the deferred gain is $180,000. What is its basis?

A. $500,000

B. $680,000

C. $320,000

D. $180,000

15. 5 pts

Why do 1031 investors use a qualified intermediary?

A. To find replacement properties for them

B. To guarantee the replacement will rise in value

C. To file their tax return

D. So that they never actually or constructively receive the sale proceeds

16. 5 pts

A family moves out of its house and rents it to a tenant but keeps its homeowner's policy. What is the main problem?

A. Homeowner's policies cost more than landlord policies

B. A homeowner's policy is written for an owner-occupied home and may not properly cover a tenant-occupied rental

C. Landlord policies cover the tenant's furniture, so the tenant is unprotected

D. There is no problem if the mortgage is paid

17. 5 pts

What should set the dwelling coverage limit on a rental house?

A. The purchase price

B. The assessed value

C. The estimated cost to rebuild the building

D. The loan balance

18. 5 pts

A landlord owns a rental in a properly run LLC and personally repairs a stair railing badly; a guest is injured. What protection does the LLC give her personally?

A. Little or none for her own negligence

B. Complete protection, because the LLC owns the property

C. Complete protection if she has an umbrella in the LLC's name

D. It transfers the claim to the lender

19. 5 pts

A new tenant pays a $1,900 security deposit that the landlord expects to return at the end of the lease. How is it recorded?

A. As rent income this month

B. As a repair reserve

C. As a capital improvement

D. As money held for the tenant, not income

20. 5 pts

In this example, a pro forma projected repairs at 6% of a $30,000 gross scheduled income. Actual repairs were $2,550. What is the variance?

A. $1,800 over budget

B. $750 over budget

C. $750 under budget

D. $2,550 over budget

ANSWER KEY

1. B. Building basis = $330,000 × 0.80 = $264,000; $264,000 ÷ 27.5 = $9,600. Choice A depreciates the land too ($330,000 ÷ 27.5); choice C uses the 39-year nonresidential period.
2. C. Repainting between tenants keeps the property in ordinary condition. A new roof is a restoration, a deck is a betterment and a garage conversion is an adaptation — all capitalized and depreciated.
3. A. Only interest is a rental expense: $1,250 × 12 = $15,000. Principal repays the loan and is never an expense, so the full $19,200 is wrong.
4. D. The $25,000 allowance is reduced by half of the MAGI over $100,000: $25,000 − 0.5 × $30,000 = $10,000. So $10,000 of the $12,000 loss may offset other income; the rest carries forward. Zero applies only at $150,000 or more.
5. C. $24,000 − $8,000 − $12,000 − $7,000 = −$3,000. Choice A is the cash flow ($24,000 − $8,000 − $12,000 − $2,500); choice D forgets depreciation.
6. A. Adjusted basis = $250,000 + $15,000 − $50,000 = $215,000; amount realized = $360,000 − $25,000 = $335,000; gain = $120,000. Choice D forgets the selling costs; choice C ignores improvements, depreciation and costs.
7. D. She owned it at least 24 months and lived in it 36 months within the 5 years before the sale, and the rental time after she moved out is not nonqualified use. Choice C fails the ownership test; B falls short of 24 months.
8. B. Publication 523 treats the rented unit of a duplex as space separate from the home, so only the gain on the owners' unit qualifies. Depreciation is never excluded.
9. A. The part of the gain equal to the depreciation is unrecaptured Section 1250 gain ($45,000); the remaining $140,000 − $45,000 = $95,000 is long-term capital gain for property held more than a year.
10. C. Gain equal to depreciation allowed or allowable after May 6, 1997 cannot be excluded, even for space within the home. Being inside the living area only means the rest of the gain need not be allocated.
11. D. The exchange period ends on the earlier of day 180 or the return due date including extensions. Without an extension, April 15 comes first. December 4, 2026 is day 45, the identification deadline.
12. B. Recognized gain is the smaller of realized gain and boot: min($200,000, $30,000) = $30,000. The other $170,000 is deferred.

13. A. Real property held primarily for sale does not qualify. Any investment or business real estate is like-kind to any other, so B, C and D can qualify.
14. C. Replacement basis is cost minus deferred gain: $500,000 − $180,000 = $320,000. The deferred gain is carried into the new property through this lower basis.
15. D. If the investor receives or controls the money, the transaction becomes a taxable sale. The intermediary holds the proceeds under a written agreement.
16. B. Once the property is rented, the owner needs a dwelling (landlord) policy with loss-of-rents and premises liability coverage, and must tell the insurer. Choice C is false: a landlord policy does not cover the tenant's belongings.
17. C. Insurance pays to rebuild the structure; the land and location in the market price are not destroyed by fire. The assessed value and the loan balance have no direct connection to rebuilding cost.
18. A. An LLC can shield owners from the company's debts and claims, but not from their own negligent acts. Liability insurance and an umbrella are the first defense.
19. D. A refundable security deposit is not income when received; it is owed back to the tenant under the lease and state law. Any amount later kept for damage or unpaid rent becomes income in that year.
20. B. Projected repairs = 0.06 × $30,000 = $1,800; variance = $2,550 − $1,800 = $750 over budget, or 8.5% of GSI actual versus 6% projected. Choice A confuses the budget with the variance.

PORTFOLIO PIECE: DEAL BINDER, UNIT 9: THE TAX, INSURANCE AND RECORDS SECTION

Add a new tabbed section to your deal binder. It holds the two-column cash-view and tax-view sheet with the depreciation schedule from Lesson 9.1; the "What Would You Keep After the Sale?" summary, with its gain split and house-hack rework, from Lesson 9.2; the 45-day exchange calendar, three replacement worksheets and boot computations from Lesson 9.3; the written protection plan, flood-map note and insurance-updated Rental worksheet from Lesson 9.4; and the three-month ledger, rent roll, owner statements and pro forma comparison from Lesson 9.5.

Every page ends the way all binder pages do: with a printed worksheet where one applies and a one-paragraph verdict — buy, negotiate to a stated price, sell, hold, exchange or walk away — defended with numbers. Taxes are shown as structure and estimates labeled "in this example," never as advice.

LOOK FOR	WHAT IT MEANS
Depreciation and the tax view	Land and building are allocated with a stated method; full-year and first-year depreciation are correct; the tax view and cash view reconcile (cash flow = taxable income + depreciation − principal); repairs and improvements are classified correctly.
Sale and exclusion analysis	Amount realized, adjusted basis and gain are computed with every step shown; the gain is split into the depreciation part and the remaining long-term gain; the Section 121 tests are applied correctly, including the duplex's rented unit and the 2-of-5 window.
1031 exchange plan	The calendar shows day 45, day 180 and the return due date; the identification follows the three-property or 200% rule; boot, recognized gain, deferred gain and replacement basis are correct; the verdict judges the replacement on its own cash flow.
Protection plan	Dwelling coverage is based on rebuild cost, loss of rents is sized, flood and earthquake gaps are checked, the umbrella is explained, the LLC discussion states both its limits and the due-on-sale question, and the Rental worksheet is updated with a realistic premium.
Books and annual review	Three months of transactions are categorized by Schedule E line; principal, deposits and improvements are handled correctly; each month has an owner statement; variances against the pro forma

LOOK FOR	WHAT IT MEANS
	are computed and explained with a specific change to next year's inputs.
Honesty, clarity and verdicts	Every page is neat, dated and labeled; example figures are marked as examples; no tax rate is stated as fact; every verdict is defended with numbers and shows sound judgment, including willingness to walk away.

UNIT 10

Building a Portfolio and the Capstone

You have spent a year learning to analyze one property at a time. This last unit asks the larger questions: how fast, with whom, with how much debt — and what could go wrong. You will learn why investors who survived 2008 kept **reserves**, how to set reserve targets and written tests for buying the **next door**, and how to pace a portfolio with a conservative ten-year plan. You will study **partnerships** — the money partner and the operating partner, the **preferred return** and the return of capital — and the 1946 orange-grove case that made raising money from passive investors a matter of **securities** law. You will compare two honest paths to a paid-off portfolio, growing with leverage or running a **rental debt snowball**, and test both against a bad year, with the case for careful debt and the case for owning free and clear presented side by side.

Then you will study failure on purpose: the 1920s Florida land boom, and six clearly labeled **composite teaching cases** of deals gone wrong, each rebuilt in the Deal Analyzer to show that the numbers warned beforehand. Finally comes the **capstone**: one real public listing analyzed from comparables to verdict, written up as an investment memo and defended in ten minutes before a panel of adults, who will score it with this unit's rubric. A careful walk-away earns as much credit as a buy. The year ends where it began — with property as a stewardship of homes and of the people who live in them.

PREREQUISITES

- Can complete any of the four Deal Analyzer worksheets and read its stress test (Units 3, 5, 6 and 7)
- Can compute NOI, cash flow, cash-on-cash return, cap rate and DSCR by hand (Unit 3)
- Can explain the risks of BRRRR and flips, and the landlord's duties under fair-housing and landlord–tenant law (Units 6–8)
- Has a deal binder of at least thirty analyzed properties, each with a verdict, and a written goal of "enough" from Lesson 1.4

MASTERY CHECKLIST

- ☐ I can compute a reserve target for a property and a portfolio and the months of saving needed for the next purchase.
- ☐ I can apply written next-door tests, including a portfolio DSCR, and compute the loan size a new property can carry at a target DSCR.
- ☐ I can compute partnership splits under a straight split, a preferred return and a return-of-capital-first waterfall.
- ☐ I can apply the Howey test and explain why raising money from passive investors calls for a securities attorney before any money is accepted.
- ☐ I can run a rental debt snowball and compare a grow path with a pay-off path on cash flow, net worth and a bad year.
- ☐ I can explain the 1920s Florida land bust and rebuild composite failed deals in the Deal Analyzer to show what the numbers warned.
- ☐ I can carry a real listing from comparables to a back-solved offer price and a written verdict with risks and an exit plan.
- ☐ I can present and defend a deal to a panel of adults, answer questions honestly and explain my duties as a steward of property and people.

OPTIONAL BOOKS AND RESOURCES FOR THIS UNIT

- **School Launch Deal Analyzer**: Free. Every lesson in this unit uses it: the Rental worksheet for the ten-year plan and the capstone, the BRRRR and Fix & flip worksheets for the composite cases, and the stress test for every verdict. Print the filled-in worksheet for your capstone memo. Ages 14 and up.
- **Investor.gov: Accredited Investors (U.S. Securities and Exchange Commission)**: Free, official. The SEC's plain explanation of exempt offerings under Regulation D and who counts as an accredited investor — background for Lesson 10.2's warning about raising money from others. Read it, then talk with a parent about why a securities attorney comes first. Ages 15 and up.
- **Investor.gov: Ponzi Scheme (U.S. Securities and Exchange Commission)**: Free, official. Red flags of investment fraud, including promised high returns with little risk — useful for Lessons 10.2 and 10.4 and for any real estate "opportunity" a friend offers you. Ages 14 and up.
- **Chad Carson, Retire Early with Real Estate (BiggerPockets Publishing)**: Optional book by a longtime small-property investor who teaches modest portfolios, careful debt and paying rentals off — a thoughtful companion to Lesson 10.3. Read it with a parent and compare its plans with your own ten-year plan. Ages 16 and up.
- **Brandon Turner, Rental Property Investing (BiggerPockets Publishing)**: Optional book, the newer edition of The Book on Rental Property Investing, covering deal analysis, financing and growing a rental portfolio in the BiggerPockets style. Use it as a second voice for the capstone and Lesson 10.1, and keep this unit's cautions about leverage beside it. Ages 16 and up.

Not required. Every project in this unit works without them. School Launch has no ties to these authors, publishers or companies.

LESSONS IN THIS UNIT

10.1 Scaling: Reserves, Pacing and the Next Door — 3 sessions of 50 minutes

10.2 Partners, Private Investors and Doing It Honestly — 3 sessions of 50 minutes

10.3 Paying Off Debt or Growing: Two Paths to a Paid-Off Portfolio

3 sessions of 50 minutes

10.4 Hard Lessons: Case Studies of Deals Gone Wrong — 3 sessions of 50 minutes

Unit 10 test

Closed notes; a basic calculator is allowed. Twenty four-choice questions, 5 points each, about two minutes per question — set a timer for 40 minutes. Show the arithmetic for every calculation question on scratch paper, choose the best answer, then check your work against the key. Aim for 80% or better, and rework every miss in your investor's notebook. Figures marked "in this example" are examples, not current rates, prices or rules.

1. **5 pts**
   In this example, a rental's PITI is $1,400 a month. The owner keeps six months of PITI plus a $5,000 CapEx fund. What is the reserve target?
   A. $8,400
   B. $6,400
   C. $13,400
   D. $19,400

2. **5 pts**
   Which is the strongest sign that an investor is ready to buy the next property?
   A. Reserves are full, every property has cash-flowed for a year, and the down payment comes from savings
   B. Prices are rising and she does not want to miss out
   C. A lender has pre-approved her for a larger loan
   D. She has a down payment if she uses her reserves

3. **5 pts**
   In this example, a portfolio's total NOI is $40,000 and total annual debt service is $36,000. What is the portfolio DSCR, and does it meet a 1.25 rule?
   A. 1.25; yes
   B. 0.90; no
   C. 1.33; yes
   D. 1.11; no

4. 5 pts

An investor decides he must buy another property this year and begins to approve deals he would have rejected last year. This is called:

A. Dollar-cost averaging

B. The buy-at-any-price trap

C. Forced appreciation

D. The 70% rule

5. 5 pts

In this example, a money partner contributes $50,000 with an 8% preferred return; yearly cash flow is $6,000; the rest is split 50/50. What does the money partner receive?

A. $5,000

B. $3,000

C. $4,000

D. $6,000

6. 5 pts

Under the Howey test, which arrangement is most likely a security?

A. Two brothers who buy a duplex together and share all decisions and work

B. A grandmother's single documented, secured loan to her grandson

C. Fifteen coworkers who each send $20,000 to a friend who alone will buy and run an apartment building

D. A couple who buys a rental with a bank mortgage

7. 5 pts

Net sale proceeds are $100,000. The money partner contributed $70,000 and the operator nothing. Capital is returned first, then profit split 50/50. What does the money partner receive?

A. $50,000

B. $85,000

C. $70,000

D. $100,000

8. 5 pts

Real estate syndications commonly rely on Regulation D in order to:

A. Avoid all disclosure to investors

B. Guarantee investors a fixed return

C. Turn passive investments into partnerships that are not securities

D. Qualify for an exemption from SEC registration, subject to rules on investors and offering methods

9. 5 pts

In a rental debt snowball, which loan receives the extra payments first?

A. The loan with the smallest balance

B. The loan with the largest balance

C. The newest loan

D. All loans equally

10. 5 pts

In this example, paying off a $160,000 loan eliminates a $1,200 monthly payment. What yearly return on the payoff does the added cash flow represent?

A. 7.5%

B. 12%

C. 9%

D. 1.2%

11. 5 pts

A 64-year-old owner of six mortgaged rentals plans to live on their cash flow. The main danger that paying down some loans would reduce is:

A. Inflation risk on her savings

B. The 1% rule

C. Depreciation recapture

D. Sequence risk — a bad year arriving just when she depends on the income

12. 5 pts

Why should reserves be full before an owner prepays mortgage principal?

A. Prepaying raises the interest rate

B. Prepaid principal is not available in an emergency, and the required payment does not fall until the loan is paid off

C. Lenders forbid prepayment until reserves are full

D. Reserves earn more than any loan costs

13. 5 pts

Which lesson does the 1920s Florida land boom teach most directly?

A. Oceanfront land always recovers its value quickly

B. Small deposits reduce risk

C. Prices based on expected resale rather than income can collapse when new buyers stop arriving

D. Hurricanes were the only cause of the bust

14. 5 pts

What is a composite teaching case?

A. A case built from common patterns with invented names and details, not one real person's story

B. A court case involving several investors

C. A real investor's confidential file

D. A case with two strategies combined

15. 5 pts

In this example, a flip's ARV is $280,000 and its rehab is $40,000. What is the 70% rule maximum offer?

A. $196,000

B. $240,000

C. $168,000

D. $156,000

16. 5 pts

In this example, a buyer put 10% down on a $250,000 rental. Values fall 15%. Ignoring principal paid, what is his equity before selling costs?

A. $25,000

B. −$12,500

C. $0

D. −$37,500

17. 5 pts

A pre-mortem asks the investor to:

A. Imagine the deal has failed and list every reason it might have, then add a safeguard for each

B. Review a deal only after it closes

C. Estimate the property's value at the owner's death

D. Compare a deal's mortgage with a competitor's

18. 5 pts

In this example, a property's NOI is $15,000. What is the maximum annual debt service for a DSCR of 1.25?

A. $18,750

B. $15,000

C. $12,000

D. $13,750

19. 5 pts

A capstone memo concludes, with full numbers, that the property loses money at any price the seller would likely accept. How should the panel score the verdict?

A. Lower, because no deal was found

B. Incomplete, because every capstone must recommend a purchase

C. Lower, unless the student assumed appreciation

D. Full credit for judgment, if the walk-away is clearly defended with the numbers

20. 5 pts

During the capstone questions, a panelist asks for the property's sewer-line age, which the student did not research. The best response is:

A. Give a reasonable-sounding guess

B. Say that he does not know, explain how he would find out (inspection or sewer scope, permit records) and how it could change the offer

C. Say that sewer lines rarely fail

D. Change the subject to the cash flow

ANSWER KEY

1. C. 6 × $1,400 = $8,400, plus $5,000 = $13,400. Choice A leaves out the CapEx fund; choice D adds the CapEx fund twice.
2. A. The next-door tests are full reserves, proven cash flow and savings for the down payment. Fear of missing out (B) and borrowing capacity (C) are not tests, and using reserves (D) weakens every property she owns.
3. D. $40,000 ÷ $36,000 ≈ 1.11, below 1.25. Choice B divides the wrong way (debt ÷ NOI).
4. B. When the goal becomes buying rather than buying well, the analysis bends to fit the wish. A written buy box and fixed tests are the defense.
5. A. Preferred return 0.08 × $50,000 = $4,000; remaining $2,000 split $1,000 each; money partner $4,000 + $1,000 = $5,000. Choice C forgets his share of the remainder.
6. C. Pooled money from passive investors in a common enterprise, expecting profits from the promoter's efforts, has all the Howey elements. In A, both partners manage; B is a single documented loan; D involves no outside investors.
7. B. Return of capital $70,000; profit $30,000 split $15,000 each; money partner $70,000 + $15,000 = $85,000. A straight 50/50 split (A) would return less than he invested.
8. D. Regulation D provides exemptions from registration — not from securities law itself — with rules on who may invest, how offerings are made and what must be filed. It never permits guaranteed returns or hiding risks.
9. A. The snowball pays the smallest balance first; when it is gone, that property's whole NOI joins the payments on the next loan.
10. C. 12 × $1,200 = $14,400; $14,400 ÷ $160,000 = 9%. Choice D forgets to annualize.
11. D. With several mortgages, a modest drop in rents can turn income negative exactly when she has no paycheck. Fewer loans make the income survive a bad year.
12. B. Equity is not cash. Without reserves, a vacancy or repair could force missed payments or a sale despite large equity.
13. C. Binder buyers bet on resale with heavy leverage; when transportation, credit and buyers dried up — before the 1926 hurricane — there was no income underneath the prices.

14. A. Composite cases teach real lessons without telling or blaming any real person's story.
15. D. $280,000 × 0.70 − $40,000 = $196,000 − $40,000 = $156,000. Choice A forgets to subtract the rehab.
16. B. New value $250,000 × 0.85 = $212,500; loan $225,000; equity = −$12,500. Selling costs would make it worse.
17. A. The pre-mortem happens before the decision and turns imagined failures into specific safeguards: inspections, offer prices, reserves and contracts.
18. C. $15,000 ÷ 1.25 = $12,000. Choice A multiplies instead of dividing.
19. D. The course rewards judgment, not optimism. A clear, numbers-based walk-away is a successful analysis.
20. B. Honesty and a plan to find the answer show judgment. Inventing a number is the worst possible answer.

PORTFOLIO PIECE: DEAL BINDER, UNIT 10: THE PORTFOLIO PLAN AND THE CAPSTONE

Finish your deal binder with this unit's work: the conservative ten-year plan with reserve targets and next-door tests from Lesson 10.1; the partnership term sheet, split spreadsheet and Howey analysis from Lesson 10.2; the two-paths fifteen-year comparison and family discussion notes from Lesson 10.3; the pre-mortem with rebuilt worksheets from Lesson 10.4; and, at the front of the binder, the capstone from Lesson 10.5 — the evidence file, the printed Deal Analyzer worksheet and stress test, the two-page investment memo with its verdict, the stewardship reflection and the panel's scored rubrics and comments.

The capstone is presented to a panel of at least two adults. Each panelist scores the six criteria below from 1 to 4 (4 = the full-marks description is met; 3 = mostly met with small gaps; 2 = partly met; 1 = missing or seriously flawed), for a total out of 24; average the panelists' totals. A score of 21–24 is excellent, 17–20 good, 13–16 needs revision, and below 13 should be redone. A well-defended walk-away can earn full marks on every criterion.

LOOK FOR	WHAT IT MEANS
Evidence	Rent comps (3–5) and sale comps (3) are real, recent, similar and adjusted; taxes are estimated after reassessment; insurance, utilities and CapEx come from documented sources; every example figure is labeled; nothing relies on the seller's claims.
Accuracy of the numbers	The correct Deal Analyzer worksheet is used and printed; NOI, cash flow, cash-on-cash, cap rate, DSCR and break-even occupancy are correct and can be worked by hand when the panel asks; units and labels are clear.
Judgment and risk	The stress test is run and taken seriously; the offer price is back-solved from a stated target; the three biggest risks each have a specific safeguard or exit plan; the verdict — buy, negotiate to a stated price, or walk away — follows from the numbers.
Investment memo	Two clear pages plus attachments: property, market, key-numbers table, verdict in bold, stress test, offer, risks and exit plan; plain, honest writing that admits uncertainty and says how it would be resolved.
Presentation and questions	Ten minutes, well organized and rehearsed; visuals support the numbers; questions are answered directly; the student says "I don't

LOOK FOR	WHAT IT MEANS
	know, and here is how I would find out" rather than inventing a figure.
Stewardship	The reflection names the people the ownership would affect — tenants, neighbors, workers, lenders, partners — and explains specific duties to each (safe housing, fair and lawful treatment, prompt payment, kept promises), connecting them honestly to the decision.

10.1 Scaling: Reserves, Pacing and the Next Door

OBJECTIVES

- Compute a reserve target for one property and for a portfolio from PITI, a CapEx fund and insurance deductibles.
- Compute how many months of saving it will take to fund the next purchase without touching reserves.
- Apply a written set of next-door tests — reserves, cash flow history, DSCR, stress test and working systems — to decide whether to buy again now.
- Compute the down payment needed for a new property to reach a target DSCR, and explain why the “buy at any price” trap destroys portfolios.
- Build a conservative ten-year portfolio plan in a spreadsheet and use the deal binder as a pipeline of analyzed properties.

> **Warm-up.** Imagine you own two rentals and have just saved enough for a third down payment — but if you spend it, your savings account will be nearly empty. In five minutes, write down three things that could go wrong in the next year, and estimate what each would cost. Then answer in one sentence: buy now, or wait?

WATCH

Rental property cash reserves: How much is enough? [Ask Coach]

Coach Carson · 14:36

https://www.youtube.com/watch?v=Eer1pdYTgV8

> **WHEN TO WATCH**
> Watch after the third core idea; use the chapter marks (capital expenses at 3:36, small portfolio at 6:07, large portfolio at 8:11, the risk-versus-growth tension at 10:20) and write his reserve rule for a small portfolio in your notebook beside the lesson's.

BACKUP VIDEO

How much do you need in cash reserves for your rental property?

The Property Pastor · 7:02

https://www.youtube.com/watch?v=BzRYwCkLGew

A short second opinion on reserves from a small-property investor; watch before the practice set, write his per-property reserve figure and his two sources of reserve money, and compare them with the reserve rule in your ten-year plan.

KEY TERMS

reserves

Cash set aside to pay a property's obligations and surprises — mortgage payments, vacancies, repairs and deductibles — without new borrowing or forced sale.

PITI

Principal, interest, property taxes and insurance — the full monthly housing payment used to size reserves and qualify for loans.

operating reserve

Reserves measured in months of a property's PITI and operating costs, held for vacancies, nonpayment and short-term shocks.

CapEx fund

Savings accumulated for large replacements such as roofs, furnaces and water heaters, funded monthly from rent.

portfolio DSCR

Total net operating income of all properties divided by their total annual debt service.

pacing

Choosing the speed of acquisitions by written tests of reserves, cash flow and capacity rather than by excitement or market noise.

buy box

An investor's written criteria for an acceptable deal: location, property type, price range, condition and minimum returns.

deal pipeline

The organized flow of properties from first look through analysis, offer and decision; in this course, the deal binder.

conservative assumptions

Projections that assume flat or slow appreciation and rent growth, steady expense growth and realistic vacancy, so that plans survive ordinary bad years.

over-leverage

Borrowing so much against a portfolio that ordinary vacancies, repairs or rate changes cannot be absorbed by cash flow and reserves.

CORE IDEAS

The story. In October 1907, panic swept New York. A failed attempt to corner a copper stock set off runs on trust companies; depositors lined up around the block, banks called in loans, and even the City of New York could not find lenders to meet its bills. One person in the city had cash: Hetty Green, a frugal heiress from a New Bedford whaling family who had spent forty years buying bonds and real estate loans cheaply and keeping enormous balances on deposit. While others scrambled to sell, she lent the city more than a million dollars. Newspapers mocked her for her plain black dresses and legendary thrift, and some of the stories about her stinginess were true. But in 1907 her habit of never being caught without cash made her one of the few people in New York who could act calmly when everyone else was afraid.

How they figured it out. Hetty Green's rule was simple — keep cash, buy what others must sell, never borrow so much that a bad year can force your hand — and generations of careful investors have relearned it the hard way. In the 2008 crisis, many small landlords who had bought one property after another with little money down and thin savings lost them when vacancies, adjustable-rate resets and falling

values arrived together, while owners with reserves and modest loans mostly survived. Lenders absorbed the same lesson: investment-property loans commonly require proof of **reserves** — months of payments held in the bank — and often more when a borrower already owns several financed properties; check the lender's current rules. The small-investor teachers this course has followed, such as Chad Carson and John Schaub, make modest debt and patient growth central themes of their books.

The big idea. Scaling is not a goal; it is a result. A portfolio grows safely only when each new property is added on top of a strong foundation: full **reserves**, proven cash flow, working systems and a deal that passes the stress test on its own. Reserves come in layers. An **operating reserve** covers several months of each property's **PITI** and fixed costs — commonly three to six months in this example range — for vacancies and nonpayment. A **CapEx fund** grows each month toward the next roof or furnace. Cash to cover each policy's **deductible** sits beside them. And the family's own emergency fund stays separate from all of it. In this example, a house with $1,185 of principal and interest, $250 of taxes and $110 of insurance a month has PITI of about $1,545; six months is about $9,271, and with a $5,000 CapEx fund the target is about $14,271 for that one door.

Before you buy the next door, test the portfolio in writing. Use questions like these, and change them only with good reason. Are every property's reserves full? Has every property produced positive cash flow, after reserve transfers, for at least the last twelve months? Is the **portfolio DSCR** — total NOI divided by total debt service — comfortably above 1.25? Will the down payment and closing costs come from savings, not from the reserves? Does the new deal pass the Rental worksheet's stress test by itself? Are your systems working — bookkeeping closed every month, a maintenance calendar, written screening criteria, a dependable repair person? And does your family agree that you have the time? If any answer is no, the right move is to fix that first. A "no" is not failure; it is how portfolios survive.

Next comes the arithmetic of saving. In this example, the next house costs $250,000 with 25% down ($62,500), $5,000 of closing costs and $3,000 of upfront repairs, and it needs its own six-month reserve of about $9,271 on day one — about $79,771 in all. If you save $1,800 a month from your job and add two rentals' cash flow of about $135 each (their reserves already full), you save about $2,070 a month, and the next door is about 39 months away. Some will call that slow. But the alternative — buying

sooner with borrowed down-payment money or drained reserves — is how the 2008 portfolios failed. Patience also protects you from the **buy-at-any-price trap**: once an investor decides he must buy a property this year, every listing starts to look like a deal, and the analysis bends to fit the wish. Keep a written **buy box** and let the numbers say no.

Your deal binder is your **pipeline**. Unit 6 showed the funnel arithmetic — analyze a hundred, offer on ten, buy one — and a scaling investor keeps that funnel full all the time, not only when the down payment is ready. When the savings target is met, the next deal should already be waiting among the analyzed properties, not found in a rush. Pacing also means honesty about markets. No one can reliably predict prices, so a careful plan does not depend on appreciation; it buys when a specific property meets the buy box and the tests, and it holds its standards whether the news is cheerful or frightening. Finally, scaling has a limit worth naming: "enough." Unit 1 asked you to set a goal in dollars of monthly cash flow, not in doors. A plan that reaches the goal with six well-chosen houses is a better plan than one that reaches it with thirty thin ones.

Run the numbers. Keep a one-page portfolio summary built from each property's printed Rental worksheet: NOI, debt service, cash flow, DSCR and reserve balance, with totals. For the next deal, run the Rental worksheet with the stress test and require that the portfolio DSCR, including the new property, stays above your threshold. If a new house would drag the portfolio DSCR down, raise the down payment until its own DSCR reaches 1.25 — in this example, a house with $15,840 of NOI can carry at most $12,672 of yearly debt service, so a 6.5% 30-year loan must be no more than about $167,000, or about 33% down on a $250,000 price. Build the ten-year plan with conservative assumptions: the Rental worksheet's projection at 0% appreciation, 2% rent growth and 3% expense growth. The classic mistakes: counting reserves as down-payment money; treating appreciation as a plan; and buying the next door because it is time, not because the deal is good.

PICTURE STUDY



Hetty Green, Hollinger & Rockey (photographers), 1897 · Photograph · Library of Congress, Prints and Photographs Division

Image: Wikimedia Commons, public domain

This portrait of Hetty Green (1834–1916) was made in 1897 by the New York studio of Hollinger & Rockey, when she was already famous as the richest woman in America and one of the shrewdest financiers of her age. She dressed plainly, lived frugally and kept large sums in cash, and the newspapers turned her thrift into cartoons. Yet her habit of holding reserves let her lend to New York City in the Panic of 1907 when others could not. She opens this lesson as a sober, imperfect witness to one durable truth: the investor with cash can wait, and the investor without it must take whatever terms a bad year offers.

Look closely

- Look at her clothing. She chose plain, inexpensive dress all her life; spending less than she earned was the source of her reserves.
- Notice her folded hands and calm face. In 1907 she was calm because she was not forced to sell anything.
- Look at the dark, empty background. There is no display of wealth in this picture at all.
- Compare this portrait with photographs of investors who show off their possessions. Which kind of image better fits a careful steward?

Talk about it

1. Why could Hetty Green lend money during a panic when many wealthy people could not?
2. Some stories say her thrift became stinginess that hurt her own family. Where is the line between prudent reserves and a love of money?
3. Proverbs 6 sends the sluggard to the ant, which gathers food in the harvest. How is building reserves in good years an act of wisdom rather than fear?

PROJECT

The Ten-Year Plan

You will write a conservative ten-year plan for a pretend portfolio that starts with one property from your deal binder. The plan must say when each next door could be bought, how it will be paid for, how reserves will be kept full, and what tests must be passed first. Then you will stress it: what happens to the plan if a bad year arrives in year 4?

You will need

- Your deal binder, including at least three analyzed properties that fit a written buy box
- A spreadsheet with tabs for Properties, Reserves, Savings and Ten-Year Plan
- The Deal Analyzer's Rental worksheet (with its projection and stress test)
- Your goal from Lesson 1.4 (monthly cash flow you would call "enough")

Steps

1. Write a one-paragraph buy box: area, property type, price range, condition, minimum cash flow, minimum DSCR and maximum price as a percent of value.
2. Start the plan with one deal-binder property. Run it in the Rental worksheet with 0% appreciation, 2% rent growth and 3% expense growth, and record NOI, debt service and cash flow by year.
3. Set a reserve rule per property (months of PITI plus a CapEx fund) and compute the target. Fund it before counting any savings toward the next door.
4. Choose a realistic monthly savings amount from a pretend job, and compute the months until the next purchase. Add each property only when the Reserves tab shows full reserves and the portfolio DSCR stays above your threshold.
5. Fill the Ten-Year Plan tab year by year: properties owned, total loan balances, NOI, debt service, cash flow, reserves and portfolio DSCR.

6. Stress test: in year 4, assume a three-month vacancy and a $9,000 furnace and roof repair in the same year. Show whether reserves cover it and how the next purchase is delayed.
7. File the plan in your deal binder with a one-paragraph verdict: does the plan reach your "enough" goal safely, and what would you change?

INVESTOR'S NOTEBOOK

1. Flashcards: reserves, PITI, operating reserve, CapEx fund, portfolio DSCR, pacing, buy box, deal pipeline, conservative assumptions, over-leverage.
2. Draw a staircase titled "The Next Door" with one step for each test: reserves full → 12 months of cash flow → portfolio DSCR ≥ 1.25 → down payment from savings → new deal passes the stress test → systems working → family agrees.
3. Trap list: reserves are NOT down-payment money · "it's time to buy" is not a reason · appreciation is not a plan · more doors is not the goal — enough cash flow is.

KEY FORMULAS

$$\text{PITI} = \text{P\&I} + \text{monthly taxes} + \text{monthly insurance}$$

$$\text{Reserve target (one door)} = \text{months} \times \text{PITI} + \text{CapEx fund} + \text{deductible}$$

$$\text{Months to next door} = \frac{\text{down payment} + \text{closing} + \text{repairs} + \text{new reserve}}{\text{monthly savings}}$$

$$\text{Portfolio DSCR} = \frac{\sum \text{NOI}}{\sum \text{annual debt service}}$$

$$\text{Maximum annual debt service} = \frac{\text{NOI}}{\text{target DSCR}}$$

From history. The Panic of 1907 also changed American banking. With no central bank, the crisis was calmed largely by private bankers led by J. P. Morgan, who organized pools of money to support failing institutions. Congress concluded that the country needed a lender of last resort, and the debates that followed led to the Federal Reserve Act of 1913. The idea at the heart of that reform is the same one this lesson teaches individual landlords: in a panic, the institution with reserves keeps its doors open.

Example 1. In this example, a rental's principal and interest are $1,185.13 a month, taxes $250 and insurance $110. The owner wants six months of PITI plus a $5,000 CapEx fund. She owns two other houses with PITI of $1,450 and $1,700 and wants the same rule for each. Find the target for this house and for the portfolio of three.

Show solution

1. PITI: $\$1{,}185.13 + \$250 + \$110 = \$1{,}545.13$.
2. This house: $6 \times \$1{,}545.13 + \$5{,}000 = \$9{,}270.78 + \$5{,}000 \approx \$14{,}271$.
3. Portfolio PITI: $\$1{,}545.13 + \$1{,}450 + \$1{,}700 = \$4{,}695.13$; six months $= \$28{,}170.78$.
4. CapEx funds: $3 \times \$5{,}000 = \$15{,}000$. Portfolio target: $\$28{,}170.78 + \$15{,}000 \approx \$43{,}171$.

Answer: About $14,271 for this house and about $43,171 for the three, before deductibles and before the family's own emergency fund, which stays separate.

Example 2. Using the same house as the model for the next purchase: price $250,000, 25% down, $5,000 closing, $3,000 upfront repairs and a new six-month reserve of $9,271. She saves $1,800 a month from her job, and two rentals with full reserves each produce $1,320 − $1,185.13 = $134.87 a month. How long until she can buy?

Show solution

1. Cash needed: $\$62{,}500 + \$5{,}000 + \$3{,}000 + \$9{,}271 = \$79{,}771$.
2. Monthly savings: $\$1{,}800 + 2 \times \$134.87 = \$2{,}069.74$.
3. Months: $\$79{,}771 \div \$2{,}069.74 \approx 38.5$, so about 39 months.
4. If she instead used $20,000 of existing reserves, she could buy about 10 months sooner — and every property would be under-reserved at once.

Answer: About 39 months, or a little over three years — a pace that keeps every property fully reserved.

Example 3. In this example, each of her three houses has NOI of $15,840 a year and debt service of $1,185.13 \times 12 = \$14{,}221.53$. Her rule is portfolio DSCR of at least 1.25. Does the portfolio pass? For the next $250,000 house with the same NOI, how large may its 6.5%, 30-year loan be?

Show solution

1. Portfolio DSCR: $\dfrac{3 \times \$15{,}840}{3 \times \$14{,}221.53} = \dfrac{\$47{,}520}{\$42{,}664.59} \approx 1.11$ — below 1.25.
2. Portfolio cash flow: $\$47{,}520 - \$42{,}664.59 = \$4{,}855.41$ a year, about $405 a month for three houses — thin.
3. Next house: maximum debt service $\$15{,}840 \div 1.25 = \$12{,}672$ a year, or $1,056 a month.
4. Loan size: the payment on $187,500 is $1,185.13, so $\$1{,}056 \div \$1{,}185.13 \times \$187{,}500 \approx \$167{,}071$; down payment $\approx \$82{,}929$ (about 33%).

Answer: The portfolio fails her 1.25 test at about 1.11. She should strengthen it first (raise rents at renewal within the law, cut costs, or pay down a loan), and any next house should carry a loan near $167,000 or less — about 33% down.

PRACTICE

1. Easy What do the letters PITI stand for?

   Show answer

   Principal, interest, taxes and insurance — the full monthly housing payment.

2. Easy Name three layers of reserves a landlord should keep.

   Show answer

   An operating reserve of several months of PITI and fixed costs, a CapEx fund for big replacements, and cash for insurance deductibles — with the family's emergency fund kept separate.

3. Easy A house's PITI is $1,300. What is a four-month operating reserve?

   Show answer

   $4 \times \$1{,}300 = \$5{,}200$.

4. Medium In this example, PITI is $1,620 and the owner wants six months plus a $6,000 CapEx fund and a $2,500 deductible. Find the reserve target.

Show answer

$6 \times \$1{,}620 + \$6{,}000 + \$2{,}500 = \$9{,}720 + \$8{,}500 = \$18{,}220.$

5. Medium An investor needs $72,000 for the next purchase and saves $1,600 a month. How many months?

Show answer

$\$72{,}000 \div \$1{,}600 = 45$ months, or 3 years and 9 months.

6. Medium Two properties have NOI of $14,000 and $19,000 and debt service of $12,000 and $13,500. Find the portfolio DSCR.

Show answer

$(\$14{,}000 + \$19{,}000) \div (\$12{,}000 + \$13{,}500) = \$33{,}000 \div \$25{,}500 \approx 1.29.$

7. Medium Explain the buy-at-any-price trap in two sentences.

Show answer

Once an investor decides he must buy something soon, his analysis bends to justify whatever is available, and he overpays or accepts thin cash flow. A written buy box and fixed tests protect him by letting the numbers say no.

8. Hard A new property will have NOI of $18,000. The investor's target DSCR is 1.30. What is the maximum annual and monthly debt service?

Show answer

$\$18{,}000 \div 1.30 \approx \$13{,}846$ a year, about $1,154 a month.

9. Hard An owner has $30,000 in reserves for a portfolio whose target is $30,000, and $45,000 in separate savings. A deal requires $60,000 to close plus a new $8,000 reserve. Should she buy? What would make it acceptable?

Show answer

Not now: she would need $68,000 but has only $45,000 of savings, so $23,000 would come from reserves, leaving the portfolio under-protected. It becomes acceptable when savings reach $68,000, or if the deal can be bought for less cash without weakening its own numbers.

10. Hard Why do lenders commonly require more reserves from a borrower who already owns several financed properties?

Show answer

Each financed property is another payment that could go unpaid during a vacancy or repair; more properties mean more ways for cash flow to fail at once. Reserves show the borrower can keep paying through ordinary bad months.

11. Challenge A friend says, “Reserves are dead money earning almost nothing. I’d rather buy another house.” Write a three-sentence response.

Show answer

Reserves are insurance that lets you keep every property through vacancies, repairs and bad years instead of selling at the worst time or borrowing at bad terms. Their return is the losses they prevent, which can be far larger than the interest they forgo. A portfolio without reserves only looks more profitable until the first bad year arrives.

12. Challenge In this example, a portfolio of three houses has total PITI of $4,700 a month and total cash flow of $400 a month. If two houses sit vacant for three months at once while expenses continue, roughly how much do reserves need to cover? Assume each house’s rent is $2,200.

Show answer

Lost rent $= 2 \times \$2{,}200 \times 3 = \$13{,}200$; the portfolio’s normal cash flow over three months $= \$1{,}200$ offsets part, so reserves must cover about $12,000, plus turnover costs. This is why six months of PITI is a common target.

COMMON MISTAKES

- Using reserves as down-payment money. The next purchase must be funded by savings, not by the cash that protects the properties you already own.
- Measuring success in doors. The goal is enough reliable cash flow; thirty thin properties can be riskier and less profitable than six strong ones.
- Planning on appreciation. Build ten-year plans at 0% appreciation; any appreciation is a bonus, not the plan.
- Ignoring the portfolio DSCR. A new property with thin coverage weakens every property you own.

- Buying because it is “time to buy.” Buy because a specific deal meets the buy box and passes the stress test.
- Mixing the family emergency fund with property reserves. Keep them separate so a job loss and a vacancy cannot drain the same account.

Make it a game · The Reserve Year. Each player owns three pretend rentals, each producing $150 a month of cash flow, and starts with a reserve of $10,000 in play money. Play twelve rounds, one per month. Each round, roll a die for each house: 1 = vacancy (lose that house’s $2,000 rent), 2 = repair ($1,500), 3–6 = normal month. Add cash flow, pay the shocks, and after each round you may buy a fourth house for $8,000 of reserves if you dare. Anyone whose reserve drops below zero must sell a house at a $5,000 loss. Highest reserve plus houses (worth $5,000 each) after twelve rounds wins.

Scripture. “Go to the ant, thou sluggard; consider her ways, and be wise: Which having no guide, overseer, or ruler, Provideth her meat in the summer, and gathereth her food in the harvest.” (Proverbs 6:6–8, KJV)

The ant needs no supervisor to tell her to store food while it is plentiful. A landlord’s reserves are gathered the same way — a little every month in good seasons — so that winter does not force a sale. The wisdom here is not fear of the future but faithful preparation for it.

10.2 Partners, Private Investors and Doing It Honestly

OBJECTIVES

- Describe the common small-investor partnership structures — the money partner and the operating partner, joint ventures for one deal and co-owned LLCs — and what each partner contributes.
- Compute cash-flow and sale-proceeds splits under a straight split, a preferred return and a return-of-capital-first waterfall.
- List the essential terms of a written partnership agreement, including decision rights, capital calls, guarantees, exit clauses and what happens at death, divorce or deadlock.
- Apply the Howey test to decide whether raising money from passive investors may be a securities offering, and describe in general terms why registration or an exemption such as Regulation D, and a securities attorney, are needed.
- Explain how to accept money from family or friends honestly: written terms, recorded security, full disclosure of risk and no promised returns.

> **Warm-up.** Two friends buy a rental together. One puts in all the money; the other finds the house, manages the rehab and handles the tenants. In five minutes, write how you think the cash flow and the profit at sale should be split, and why. Then list three things that could go wrong between them in ten years that no one is thinking about today.

WATCH

How to Best Structure a Partnership for Investing in Rental Properties | Daily Podcast 184

BiggerPockets · 12:14

https://www.youtube.com/watch?v=uwYr3wPSUIE

> **WHEN TO WATCH**
> This episode is audio over a still image, so listen while taking notes; after the fourth core idea, write down each partnership structure he describes and compare its split with the worked examples. Treat any split he suggests as an example to negotiate, not a rule.

BACKUP VIDEO

SEC vs W.J. Howey Co. - Investment Contracts and the Modern Definition of a Security

George Roberts III, PhD · 4:47

https://www.youtube.com/watch?v=b6FpIofbozo

A short explanation of the Howey case and the investment-contract test; watch after the sixth core idea and write the test's elements in your own words.

KEY TERMS

money partner

A partner who supplies most or all of the cash for a deal and usually takes a smaller role in its daily operation.

joint venture

A partnership formed for a single project or property, with terms that end when the project ends.

operating partner

A partner who finds, rehabs and manages the deal and contributes time, skill and often a loan guarantee rather than most of the cash.

operating agreement

The written contract that governs an LLC: ownership percentages, contributions, decisions, distributions, transfers and exit.

preferred return

A return paid to an investing partner from cash flow before the remaining cash flow is split, often stated as a yearly percent of capital contributed.

return of capital

Repaying partners' contributed cash out of sale or refinance proceeds before profits are split.

capital call

A demand under the agreement that partners contribute additional money, for example to cover a large repair or a vacancy.

buy-sell provision

Terms that set how and at what price one partner may or must buy out another, for example at death, disability, divorce or deadlock.

security

Under federal law, an investment instrument such as a stock, bond or investment contract; offers and sales must be registered or qualify for an exemption.

Howey test

The Supreme Court's 1946 test for an investment contract: an investment of money in a common enterprise with an expectation of profits from the efforts of others.

Regulation D

A set of SEC rules providing exemptions from registration for certain private offerings, commonly used by real estate syndications, with limits on who may invest and how offerings are made.

syndication

Pooling money from several passive investors, managed by a sponsor, to buy a larger property; generally a securities offering.

CORE IDEAS

The story. In the 1940s the W. J. Howey Company owned large citrus groves in Lake County, Florida, near a resort hotel it also ran. The company offered hotel guests and other buyers narrow strips of its orange groves — sometimes just a few rows of trees — together with a service contract under which a related company would cultivate the trees, harvest the fruit, market it and send the owners their share of the profits. Most buyers lived far away, knew nothing about growing oranges and never intended to. The deeds were real deeds to real land. But the Securities and Exchange Commission said that what the buyers were really purchasing was not a farm but an

investment in someone else's work, and that the company had sold unregistered securities. On May 27, 1946, in *SEC v. W. J. Howey Co.*, the Supreme Court agreed.

How they figured it out. The Securities Act of 1933, passed after the 1929 crash, required that offerings of securities be registered with full disclosure unless an exemption applied, and it listed "investment contract" among the things that count as securities. States had passed their own "blue sky" laws even earlier, beginning with Kansas in 1911. In *Howey* the Court explained what an investment contract is: a contract, transaction or scheme in which a person invests money in a common enterprise and is led to expect profits from the efforts of a promoter or a third party. The form does not matter — deeds, notes or partnership shares — if the substance is passive investors relying on someone else's work. Courts have applied the **Howey test** to real estate deals ever since, which is why a landlord who raises money from friends must understand it.

The big idea. Partnerships let people combine what each lacks: one has cash, another has time and skill. The common small-investor pattern is a **money partner** and an **operating partner** who buy one property as a **joint venture** or own it through an LLC with a written **operating agreement**. Both partners usually take part in decisions, both understand the property, and the split rewards each contribution fairly. Done well, a partnership lets a young investor with no capital start sooner and lets an older investor with capital earn a return without the daily work. Done carelessly — on a handshake, with vague expectations — it can ruin both the deal and the friendship. Psalm 15 describes the person who "sweareth to his own hurt, and changeth not": a good partner keeps his word even when the deal turns against him, and a wise partner writes the word down so there is no argument about what it was.

The money questions come first. A **straight split** divides cash flow and sale profit by agreed percentages, such as 50/50. A **preferred return** pays the investing partner a stated yearly percent on his capital before anything is split. A **return of capital** provision sends contributed cash back to the partners who put it in before any profit is divided. In this example, a money partner contributes $60,000 and the deal produces $4,800 of yearly cash flow. A straight 50/50 split pays each partner $2,400 — only 4% on the money partner's cash. With a 6% preferred return, the money partner first receives $3,600, and the remaining $1,200 is split $600 each, so he earns $4,200 (7%) and the operator $600. Neither is "right"; each partner must understand exactly what he will receive. The agreement also says who signs and **guarantees** the

loan, who funds reserves, and what happens when a **capital call** is needed for a $10,000 roof.

The hard clauses matter most because no one wants to talk about them. A good agreement says how decisions are made (which need both partners, which one may make alone); how and when profits are distributed; what happens if a partner will not or cannot meet a capital call; whether a partner may sell his share and whether the other has a **right of first refusal**; and a **buy-sell provision** that sets a price method for buyouts at death, disability, divorce, retirement or **deadlock**. It names an end: sell after a set number of years, refinance and return capital, or one partner buys the other out. It requires books, statements and access to records. And it is written by a licensed attorney in your state, read by both partners, signed, and kept. A handshake partnership feels like trust, but a written agreement is the greater kindness, because it protects the friendship from the day the memories differ.

When you raise money from people who will not take part in running the deal — a relative who just wants a return, ten coworkers who each send $20,000 — the arrangement can be a **security** under the Howey test. Securities must be registered or fit an exemption. Real estate **syndications** commonly rely on exemptions in the SEC's **Regulation D**, whose rules limit who may invest (some offerings are limited mostly to "accredited" investors meeting income or net-worth standards), how the offering may be advertised and what disclosure is required, and generally call for a notice filing; states have their own rules too. Mistakes can mean refunding investors' money, fines and liability for misleading statements. This course does not teach how to run an offering; it teaches you to recognize when you need a securities attorney before you accept a dollar. For family money in any form: put terms in writing, record a mortgage or deed of trust if it is a loan, disclose the risks plainly, never promise a return, and never take money someone cannot afford to lose.

Run the numbers. The Deal Analyzer computes the property's results; the partnership split comes after. Run the Rental (or BRRRR) worksheet for the whole deal first, using the full cash invested by all partners, and confirm the property cash-flows after reserves and passes the stress test — a partnership cannot fix a bad deal. Then build a small split table: each partner's contribution, preferred return, share of remaining cash flow and share of sale proceeds, and each partner's own cash-on-cash return. Test the bad year too: if cash flow turns negative, who pays? Classic mistakes: splitting cash flow before funding reserves; giving the operating partner

equity with no return of capital to the money partner; promising friends a fixed return the property cannot guarantee; and calling a pooled investment from passive investors a “partnership” to avoid the securities laws.

PICTURE STUDY



Orange Grove and Pineries, Orlando, Fla., Detroit Photographic Company, 1904 · Color photomechanical print (postcard) · Newberry Library, Chicago (Curt Teich Postcard Archives collection)
Image: Wikimedia Commons, public domain

The Detroit Photographic Company (later the Detroit Publishing Company) turned black-and-white photographs into richly colored prints and postcards that Americans bought by the millions around 1900, often as souvenirs of trips to resorts like central Florida. This 1904 card shows the kind of citrus country around Orlando where, forty years later, the W. J. Howey Company sold strips of orange grove to distant buyers. It opens this lesson because groves like these look like simple land — yet the Supreme Court decided that when buyers rely entirely on someone else to tend the trees and send the profits, what they are buying is an investment in that someone else.

Look closely

- Look at the neat rows of orange trees. In the Howey case, buyers purchased a few rows like these without ever planning to tend them.
- Find the long shaded field of pineapples. Farming here took skill, equipment and constant labor — the "efforts of others" the buyers relied on.
- Notice the farm buildings and tower. A working enterprise like this was the "common enterprise" in which many buyers' money was pooled.
- Read the caption at the bottom. Postcards like this advertised Florida to people far away — the same people who later bought land they had never

seen.

Talk about it

1. Why did the Supreme Court say the Howey buyers had bought securities even though they received real deeds to real land?
2. If a friend offered you a share of a rental and asked you to do nothing but send money, which questions should you ask before agreeing?
3. Psalm 15:4 praises the one who “sweareth to his own hurt, and changeth not.” Why is keeping your word to a partner hardest exactly when the deal goes badly?

PROJECT

The Partnership Term Sheet

You will design a pretend two-person partnership for one property in your deal binder and write a one-page term sheet — the plain-language summary an attorney would turn into an agreement. You will model the cash-flow and sale splits in a spreadsheet, stress-test them with a bad year, and write a short Howey analysis of what would change if you invited passive investors instead.

You will need

- One deal-binder property analyzed in the Rental or BRRRR worksheet
- A spreadsheet with tabs for Contributions, Yearly Splits and Sale Waterfall
- Investor.gov's page on accredited investors and Regulation D (free, SEC)
- A parent or mentor to play the other partner and negotiate

Steps

1. Run the property in the Deal Analyzer and print it. Record total cash needed, yearly cash flow after reserves and a five-year sale estimate.
2. Decide each partner's contribution: cash, time, skill, credit and loan guarantee. Write them in a table.
3. Negotiate with your parent or mentor and choose a split: straight percentages, a preferred return, return of capital first, or a combination. Model five years of cash flow and the sale in the spreadsheet.
4. Stress-test a bad year: a $10,000 repair and a two-month vacancy. Show the capital call each partner would owe and what happens if one cannot pay.
5. Write the term sheet: contributions, splits, decisions, reserves, capital calls, guarantees, books and statements, transfer limits, buy-sell triggers and price method, deadlock, and planned exit.
6. Write a half-page Howey analysis: if you instead raised $200,000 from eight passive investors, which elements of the test would be present, and why would you need a securities attorney first?

7. File the printed worksheet, the spreadsheet printout and the term sheet in your deal binder with a one-paragraph verdict: is this partnership fair to both partners, and would you sign it?

INVESTOR'S NOTEBOOK

1. Flashcards: money partner, operating partner, joint venture, operating agreement, preferred return, return of capital, capital call, buy-sell provision, security, Howey test, Regulation D, syndication.
2. Draw a waterfall: sale proceeds pour first into RETURN OF CAPITAL, then into PREFERRED RETURN owed (if any), then split into PROFIT SHARES, with the dollar amounts from Worked Example 2.
3. Trap list: a handshake is not an agreement · reserves before splits · return capital before splitting profit · passive investors + your efforts = probably a security · never promise a return.

KEY FORMULAS

$$\text{Preferred return} = \text{capital contributed} \times \text{pref rate}$$

$$\text{Remaining cash flow} = \text{cash flow} - \text{preferred return}$$

$$\text{Partner's cash-on-cash} = \frac{\text{partner's yearly distributions}}{\text{partner's contribution}}$$

$$\text{Sale profit to split} = \text{net sale proceeds} - \text{return of capital}$$

From history. Kansas passed the first state securities law in 1911. According to the story usually told, its banking commissioner complained that promoters were selling schemes backed by nothing but "the blue sky," and the nickname stuck: state securities laws are still called blue-sky laws, and every state has one. A real estate investor raising money may need to satisfy the securities rules of each state where an investor lives, in addition to the federal rules — one more reason to hire a securities attorney first.

Example 1. In this example, a money partner contributes $60,000 (down payment, closing costs and repairs) and an operating partner finds the property, oversees the rehab and manages it. After reserves, the rental produces $4,800 of yearly cash flow. Compare (a) a straight 50/50 split with (b) a 6% preferred return to the money partner, then 50/50.

Show solution

1. (a) Straight split: each receives $\$4{,}800 \div 2 = \$2{,}400$. Money partner's cash-on-cash: $\$2{,}400 \div \$60{,}000 = 4\%$.
2. (b) Preferred return: $0.06 \times \$60{,}000 = \$3{,}600$ to the money partner first.
3. Remaining: $\$4{,}800 - \$3{,}600 = \$1{,}200$, split $600 each.
4. Money partner: $\$3{,}600 + \$600 = \$4{,}200$ (7%). Operating partner: $600.

Answer: Straight split: $2,400 each. With a 6% preferred return: $4,200 and $600. The operator's larger reward under (b) must come later, from his share of the sale.

Example 2. Same deal. After 5 years they sell; after the loan payoff and selling costs, net proceeds are $90,000. Compare (a) a straight 50/50 split of proceeds with (b) return of the $60,000 capital first, then 50/50. Then total each partner's five-year result under (b), using the preferred-return cash flow from Example 1.

Show solution

1. (a) Straight split: $\$90{,}000 \div 2 = \$45{,}000$ each. The money partner gets back less than the $60,000 he put in.
2. (b) Return of capital: $60,000 to the money partner; profit $\$90{,}000 - \$60{,}000 = \$30{,}000$, split $15,000 each.
3. Money partner, five years under (b): cash flow $5 \times \$4{,}200 = \$21{,}000$ plus $\$60{,}000 + \$15{,}000 = \$75{,}000$ at sale $= \$96{,}000$ on $60,000 invested.
4. Operating partner, five years: $5 \times \$600 = \$3{,}000$ plus $\$15{,}000 = \$18{,}000$ for his work.
5. Under a straight split of everything, the money partner would receive $5 \times \$2{,}400 + \$45{,}000 = \$57{,}000$ — less than his $60,000.

Answer: Returning capital first protects the money partner's principal; without it, he would have lost money on a profitable deal. Whether $18,000 fairly rewards five years of the operator's work is a question to settle in writing before buying.

Example 3. Apply the Howey test — investment of money, common enterprise, expectation of profits from the efforts of others — to three situations. (1) Two sisters each contribute half the money for a duplex, share every decision and split the work. (2) An investor collects $25,000 each from twelve coworkers for a fourplex he alone will find, buy and manage, promising them "about 10% a year." (3) A grandfather lends his grandson $40,000 on a written note secured by a recorded deed of trust at a fixed interest rate.

Show solution

1. (1) Both invest money, but both actively manage; profits do not come from the efforts of others. Likely a true partnership, not a security — though their written agreement still matters.
2. (2) Twelve passive investors, pooled money, profits expected entirely from his efforts — all three elements are present. This is very likely a securities offering that must be registered or exempt, and the promised return is a red flag.
3. (3) A single loan between family members, on written terms with recorded security, is an ordinary loan to analyze honestly; even so, notes can be securities in some circumstances, so the family should get advice before larger or repeated loans.
4. In every case: write it down, disclose the risks and do not promise what the property cannot guarantee.

Answer: (1) Likely not a security; (2) very likely a security requiring a securities attorney before any money is accepted; (3) an ordinary documented loan, handled with care. The test looks at substance, not labels.

PRACTICE

1. Easy What does each partner usually contribute in a money-partner/operating-partner deal?

   Show answer

   The money partner contributes most or all of the cash; the operating partner contributes the work — finding, rehabbing and managing the property — and often credit or a loan guarantee.

2. Easy Name the three elements of the Howey test.

Show answer

An investment of money, in a common enterprise, with an expectation of profits from the efforts of others.

3. Easy Why should a partnership agreement be written and signed even between close friends or family?

Show answer

Memories and expectations differ over years; a written agreement settles contributions, splits, decisions and exits in advance and protects the relationship when something goes wrong.

4. Medium A money partner contributes $80,000 with an 8% preferred return; yearly cash flow is $9,000; the rest is split 50/50. What does each receive?

Show answer

Preferred return $6,400; remaining $2,600 split $1,300 each. Money partner $7,700; operator $1,300.

5. Medium In problem 4, if yearly cash flow is only $5,000, what happens to the preferred return?

Show answer

All $5,000 goes to the money partner, $1,400 short of the $6,400 pref. The agreement must say whether the shortfall accrues (is owed later) or is simply lost; the operator receives nothing that year.

6. Medium Net sale proceeds are $150,000; the partners contributed $70,000 (money partner) and $10,000 (operator). Capital is returned first, then profit split 60/40 (money/operator). Find each partner's proceeds.

Show answer

Return capital $80,000; profit $70,000 split $42,000 and $28,000. Money partner $\$70{,}000 + \$42{,}000 = \$112{,}000$; operator $\$10{,}000 + \$28{,}000 = \$38{,}000$.

7. Medium List five events a buy-sell provision should address.

Show answer

Any five of: death, disability, divorce, retirement or wish to exit, deadlock between partners, failure to meet a capital call, bankruptcy, and a partner's wish to sell to an outsider.

8. Hard An operating partner signs the personal guarantee on the loan, and the money partner does not. Why should the split recognize this?

Show answer

The guarantor carries the risk of personal liability if the deal fails — a real contribution beyond labor. The agreement can reward it with a larger share, a guarantee fee, or a duty for the money partner to share losses.

9. Hard A young investor posts online: "Invest $10,000 in my next rental and earn a guaranteed 12%!" Identify two legal and ethical problems.

Show answer

Soliciting passive investors publicly for a deal he alone will run is likely a securities offering that must be registered or exempt, with rules on advertising and investors. And "guaranteed" returns from real estate are misleading — rents, repairs and values are uncertain — and are a common warning sign of fraud.

10. Hard Two partners split cash flow 50/50 every month and keep no reserves. Year 3 brings a $12,000 sewer replacement. What should the agreement have required?

Show answer

Reserves funded before any distribution, and a capital call clause saying how each partner contributes (and what happens if one cannot) when reserves fall short.

11. **Challenge** Your aunt offers to lend you $50,000 for a down payment "and we'll figure out the details later." Write the four terms you would insist on writing down first, and why.

Show answer

Amount and interest rate; payment schedule and maturity (including what happens at a sale or refinance); security — a recorded mortgage or deed of trust or a written statement that it is unsecured; and what happens if you cannot pay or if she needs the money back early. Writing it protects her money and your relationship, and you should disclose the risks plainly and confirm with the lender that borrowed down-payment money is allowed.

12. **Challenge** Explain in three sentences why a sponsor who calls a pooled investment a "partnership" may still be selling securities.

Show answer

The Howey test looks at substance, not names. If investors put in money, pool it in a common enterprise and expect profits from the sponsor's efforts rather than their own, the interests can be investment contracts whatever they are called. The sponsor must register the offering or meet an exemption, and should get a securities attorney before raising money.

COMMON MISTAKES

- Partnering on a handshake. Put contributions, splits, decisions, capital calls, buy-sell terms and the exit in a signed agreement prepared by an attorney.
- Splitting profit without returning capital first. A straight split can leave the money partner with less than he invested on a profitable deal.
- Distributing every dollar of cash flow. Fund reserves first, then split what is left.
- Promising a fixed or "guaranteed" return. Real estate returns are uncertain; such promises mislead and are a classic fraud warning sign.
- Assuming that calling it a partnership avoids securities law. Pooled money from passive investors relying on your efforts is likely a security.
- Taking family money casually. Write the terms, record the security, disclose the risk and never take money someone cannot afford to lose.

Make it a game · Who Gets What?. Write ten partnership cards, each with contributions and terms: “Money partner $60,000, 6% pref, then 50/50; cash flow $4,800,” “Sale proceeds $90,000, capital first, then 50/50.” One player reads a card; everyone races to write each partner’s share on scratch paper. Closest correct answer wins the card; ties go to the player who also names one missing clause the agreement needs. Finish with three “Security or not?” cards read aloud; correct Howey calls earn a bonus card.

Scripture. “In whose eyes a vile person is contemned; but he honoureth them that fear the LORD. He that sweareth to his own hurt, and changeth not.” (Psalm 15:4, KJV)

Psalm 15 describes the person who may dwell with the Lord, and one mark of that person is that he keeps his promises even when keeping them costs him. A partnership is a long promise. Writing it carefully, disclosing every risk to those whose money you take, and honoring the agreement when the deal turns bad are ways of living out this verse in business.

10.3 Paying Off Debt or Growing: Two Paths to a Paid-Off Portfolio

OBJECTIVES

- Explain how fully amortizing mortgages made paid-off property possible for ordinary families, and contrast them with the short balloon loans that failed in the 1930s.
- Run a rental debt snowball: order the loans, apply all cash flow and extra savings to one loan at a time, and roll each freed payment into the next.
- Compare a grow-with-leverage path and a pay-off path over 15 years on cash flow, debt, net worth with and without appreciation, and survival in a bad year.
- Compute the interest saved and years cut by extra principal payments, and weigh that guaranteed saving against returns forgone and lost liquidity.
- Present both the case for careful, limited debt and the case for owning free and clear, including the Dave Ramsey view, and explain why the choice belongs to each family.

> **Warm-up.** You own three rentals with mortgages and have $2,000 a month to spare. In five minutes, write two plans: Plan A, use the money to buy more rentals; Plan B, use it to pay off the three you have. For each, write one way it could make you richer and one way it could hurt you. Circle the plan you would choose today — and keep it to see whether you change your mind.

WATCH

How to Pay Off Your Rental Property Mortgage Early - The Rental Debt Snowball

Coach Carson · 21:17

https://www.youtube.com/watch?v=_hUIoK6Pz7I

> **WHEN TO WATCH**
> Watch after the fourth core idea with your notebook open; copy his rental debt snowball steps and his three-house example, then compare his payoff time with the worked example's. His numbers are examples from the year he recorded it.

BACKUP VIDEO

5 Paid-Off Rentals vs. 15 Rentals with Mortgages

BiggerPockets · 21:54

https://www.youtube.com/watch?v=SjSbPBQ4mFg

Watch 1:34–8:18 and 9:17–18:00 (skip the sponsor segment at 8:18); compare his five paid-off rentals and fifteen leveraged rentals with the worked examples, and note where he includes "What Dave Would Do."

KEY TERMS

fully amortizing loan

A loan whose regular payments cover interest and enough principal to repay the balance completely by the end of the term.

balloon loan

A loan whose payments do not repay the balance by maturity, leaving a large final payment that must be paid or refinanced.

free and clear

Owned with no mortgage or other lien; all net operating income is cash flow.

rental debt snowball

A plan that sends all extra cash to one rental loan at a time until it is paid off, then rolls that freed payment into the next loan.

prepayment

A payment of principal beyond the scheduled amount; it shortens the loan and reduces total interest but does not lower the required monthly payment.

opportunity cost

The return given up by choosing one use of money instead of the next-best use.

liquidity

How quickly an asset can be turned into cash without loss; equity in a house is far less liquid than money in a bank.

net worth

Total assets minus total liabilities; for a portfolio, property values plus cash minus loan balances.

sequence risk

The danger that a bad period arrives at a vulnerable time, such as retirement, when an owner depends on the income and cannot wait for recovery.

recast

A lender's recalculation of the monthly payment after a large principal prepayment, keeping the rate and term; not all lenders offer it.

CORE IDEAS

The story. In the 1920s most American home loans were short — commonly five to ten years — and many required little or no principal until a large **balloon** payment at the end, which borrowers expected to refinance. When the Depression came, banks stopped refinancing, incomes fell and values dropped. Families who had paid faithfully for years suddenly owed their whole balance at once. By 1933 historians estimate that roughly a thousand homes a day were being foreclosed. On June 13, 1933, Congress created the Home Owners' Loan Corporation, which over the next three years refinanced about a million troubled mortgages into something most Americans had never had: a long, **fully amortizing** loan, typically 15 years, whose steady payments would actually pay the debt to zero. When the corporation wound up its affairs in 1951, it reported a small profit.

How they figured it out. The lesson of the 1930s was that the danger was not only how much a family borrowed but the shape of the debt. A balloon loan depends on a lender's willingness to refinance at the worst possible moment; an amortizing loan shrinks every month and ends. The Federal Housing Administration, created in 1934, spread the amortizing loan across the country, and terms grew to 20, then 30

years. For a generation after, families held "mortgage-burning" parties when the last payment was made. Rental investors inherited both lessons. Long, fixed-rate, amortizing debt is far safer than short or balloon debt, and every amortizing loan is a slow path to owning the property **free and clear**. The question this lesson asks is how fast to walk that path — and whether to add more properties first.

The big idea. There are two honest paths to a paid-off portfolio. The **grow-with-leverage** path keeps loans in place and uses savings and cash flow to buy more properties, betting that more doors, rising rents and appreciation will build more wealth; later, the owner may sell some properties to pay off the rest. The **pay-off** path buys fewer properties and sends every spare dollar to the mortgages until they are gone, trading possible growth for certainty and lower risk. Many BiggerPockets-community investors favor careful leverage; Chad Carson and John Schaub teach paying off a modest number of rentals; and Dave Ramsey argues for avoiding debt entirely and buying rentals only with cash. Each view has numbers behind it. This course presents them fairly and leaves the choice to your family; what it insists on is that you compare them with real numbers, including a bad year.

The **rental debt snowball** turns the pay-off path into a routine. List the loans from smallest balance to largest. Pay the minimum on all of them. Send all extra money — job savings plus every rental's cash flow — to the smallest. When it is paid off, that property's entire NOI joins the snowball for the next loan, and the snowball grows each time. In this example, three houses each produce $1,320 a month of NOI and carry $187,500 loans at 6.5% for 30 years ($1,185.13 a month), so each nets $134.87. Adding $2,000 a month of savings, the first snowball is $2,404.62 a month. A month-by-month spreadsheet shows the first house paid off in month 62, the second in month 103 and the third in month 133 — about 11 years — after which the three houses produce $3,960 a month with no mortgages at all.

Paying down a loan is a guaranteed return equal to its interest rate: every extra dollar of principal on a 6.5% loan saves 6.5% interest, before taxes, with no risk. In this example, adding $500 a month to one $187,500 loan pays it off in about 14¼ years instead of 30 and cuts total interest from about $239,146 to about $100,442 — a saving of about $138,700. The costs are real too. The money is locked inside the house, so it is not available in an emergency (**liquidity**); the required payment does not drop until the loan is gone unless the lender offers a **recast**; and the money could have earned a different return elsewhere (**opportunity cost**). That is why careful pay-

off investors fill their reserves first and only then prepay — a half-paid-off house with empty reserves can be lost as easily as a fully leveraged one.

Now compare the paths at year 15 in the worked examples' numbers, with flat rents and values to keep the arithmetic honest. The grow path buys houses four, five and six in months 29, 55 and 80, then keeps saving; at year 15 it has six houses, about $878,600 of debt and about $809 a month of cash flow. The pay-off path has three houses, no debt and $3,960 a month. If values never rise, the pay-off path has the higher net worth (about $1,033,000 to $902,000), because the grow path paid so much interest; if values rise 3% a year, the grow path pulls ahead (roughly $1.74 million to $1.45 million). Then test a bad year in which NOI falls 25%: the grow path's six mortgages turn its cash flow to about −$1,171 a month, while the pay-off path still produces $2,970. That last comparison is **sequence risk**: a bad year at 35 is a lesson; at 65, living on the rent, it can be a crisis.

Run the numbers. In the Rental worksheet, set the down payment to 100% to see what each property earns free and clear; that cash flow is the destination of the pay-off path. Then compare the extra cash flow with the loan balance you would have to pay off to get it: in this example, paying off $187,500 raises cash flow by $1,185 a month, a 7.6% yearly return on the payoff (the 6.5% interest saved, plus the principal you would have repaid anyway). For the grow path, run the next property with the stress test and ask whether the whole portfolio survives a 25% NOI drop. Common mistakes: comparing only net worth at 3% appreciation and ignoring the bad year; prepaying while reserves are empty; assuming a big equity balance can always be borrowed against in a crisis; and deciding by temperament alone instead of by numbers your family has read together.

PICTURE STUDY



Isadore Haumont and Family in Front of Their Two-Story Sod House, Custer County, Nebraska, Solomon D. Butcher, 1886 · Albumen photographic print · Library of Congress, Prints and Photographs Division
Image: Wikimedia Commons, public domain

Solomon D. Butcher (1856–1927) spent decades photographing the settlers of Custer County, Nebraska, in front of the homes they built with their own hands, often from blocks of prairie sod because the plains had almost no timber. Most sod houses were one low story; the Haumont family's two-story house was rare and ambitious. Homesteaders earned title to their land by living on it and improving it for years, and a house like this, built from the ground itself, was owned outright. It opens this lesson as a picture of the goal many families still choose: a modest property that is truly theirs, owing nothing to anyone.

Look closely

- Look at the thickness of the sod walls. Every block was cut and laid by hand; this house was built slowly, with labor instead of borrowed money.
- Find the second story. Building upward was a way of growing — the same question this lesson asks about adding more properties.
- Notice the family standing in a row. A home owned free and clear protected them in the hard years that came to the plains.
- Look at the empty land around the house. On the frontier there was no bank to refinance a loan in a bad year; the only safety was owning what you had.

Talk about it

1. What would the Haumont family have gained, and risked, if they had borrowed money to build two more houses instead of one larger one?
2. Why might an owner choose a smaller, paid-off portfolio even if a larger, leveraged one could become worth more?
3. Romans 13:8 says, “Owe no man any thing, but to love one another.” Christians have read this verse differently on the question of all borrowing — how does it speak to the way a debtor should treat what he owes?

PROJECT

Two Paths, Fifteen Years

You will model the two paths of this lesson in a spreadsheet for a pretend portfolio of three properties from your deal binder. You will run a rental debt snowball, run a grow-with-leverage plan, compare them at year 15 with and without appreciation, and test both against a bad year. Then you will discuss the results with your parents and write the path your family would choose and why.

You will need

- Three analyzed rentals from your deal binder (or three copies of one), each with NOI and loan terms from the Rental worksheet
- A spreadsheet with a month-by-month tab for each path (180 rows)
- The Rental worksheet with the down payment set to 100% to see free-and-clear cash flow
- Your “enough” goal from Lesson 1.4

Steps

1. For each property, record NOI, loan balance, rate, payment and cash flow. Run each one at 100% down to see its free-and-clear cash flow.
2. Pay-off tab: each month, compute interest and principal on every loan, add savings plus all cash flow to the snowball, and apply it to the smallest balance. Record the month each loan is paid off.
3. Grow tab: each month, add savings plus cash flow to a cash account; when it reaches the down payment and closing costs for another identical property, buy it and add its loan. Stop at six properties and keep saving.
4. At month 180, record for each path: properties, total debt, cash, monthly cash flow and net worth with flat values; then recompute net worth with 3% yearly appreciation.
5. Stress test both: cut every property’s NOI by 25% for a year and compute each path’s monthly cash flow.
6. Read Romans 13:8 and Proverbs 22:7 with your parents and discuss the results. Write down where you agree and disagree.

7. File the printouts in your deal binder with a one-paragraph verdict: which path fits your family's goal of "enough," and what single number most influenced the decision.

INVESTOR'S NOTEBOOK

1. Flashcards: fully amortizing loan, balloon loan, free and clear, rental debt snowball, prepayment, opportunity cost, liquidity, net worth, sequence risk, recast.
2. Draw two roads leaving the same three houses: the GROW road (six houses, more debt, more upside) and the PAY-OFF road (three houses, no debt, steady income), with the year-15 numbers written along each and a storm cloud labeled "NOI −25%."
3. Trap list: reserves BEFORE prepaying · prepaying doesn't lower the payment until the loan is gone · net worth at 3% appreciation is not the whole story · a bad year at 65 is different from a bad year at 35.

KEY FORMULAS

$$\text{Free-and-clear cash flow} = \text{NOI}$$

$$\text{Snowball payment} = \text{extra savings} + \sum \text{cash flow} + \sum \text{payments freed by paid-off loans}$$

$$\text{Return on paying off a loan} = \frac{12 \times \text{P\&I eliminated}}{\text{balance paid off}}$$

$$\text{Net worth} = \sum \text{property values} + \text{cash} - \sum \text{loan balances}$$

From history. The 30-year fixed-rate mortgage that most American homeowners use today grew out of the 1930s reforms and the federal programs that followed. Few other countries offer long fixed-rate loans as widely, and many homeowners abroad face rates that change every few years. For a rental investor, a long fixed-rate loan means the largest expense cannot rise when rates do — one reason careful leverage investors prefer it, and one reason pay-off investors can prepay on their own schedule.

Example 1. In this example, three rental houses each produce NOI of $1,320 a month and carry $187,500 loans at 6.5% for 30 years. The owner adds $2,000 a month of savings. Set up the debt snowball.

Show solution

1. Payment per loan: $1,185.13. Cash flow per house: $\$1{,}320 - \$1{,}185.13 = \$134.87$.
2. First snowball: $\$2{,}000 + 3 \times \$134.87 = \$2{,}404.62$ a month of extra principal on house 1.
3. After house 1 is paid off (month 62 in a month-by-month spreadsheet), its full NOI joins: $\$2{,}000 + \$1{,}320 + 2 \times \$134.87 = \$3{,}589.74$ a month toward house 2.
4. After house 2 (month 103): $\$2{,}000 + 2 \times \$1{,}320 + \$134.87 = \$4{,}774.87$ a month toward house 3, paid off in month 133.
5. Free and clear: $3 \times \$1{,}320 = \$3{,}960$ a month of cash flow.

Answer: All three loans are gone in about 133 months — roughly 11 years — leaving $3,960 a month, with rents and expenses held flat in this example.

Example 2. Compare the two paths at year 15 (same owner, same $2,000 a month). Grow path: buy a fourth, fifth and sixth identical house whenever $67,500 (25% down plus closing) is saved, then keep saving. Pay-off path: the snowball above, then keep saving. Spreadsheet results: grow path — houses bought in months 29, 55 and 80; debt $878,592; cash $281,043. Pay-off path — no debt; cash $283,016. Each house is worth $250,000 if values are flat. Compare cash flow, net worth and a year in which NOI falls 25%.

Show solution

1. Cash flow: grow $6 \times \$134.87 = \$809.22$ a month; pay-off $3 \times \$1{,}320 = \$3{,}960$ a month.
2. Net worth, flat values: grow $6 \times \$250{,}000 + \$281{,}043 - \$878{,}592 = \$902{,}451$; pay-off $3 \times \$250{,}000 + \$283{,}016 = \$1{,}033{,}016$.
3. With 3% yearly appreciation on every house (a rough upper estimate), the spreadsheet gives about $1.74 million for the grow path and $1.45 million for the pay-off path.
4. Bad year, NOI down 25% to $990 a house: grow $6 \times (\$990 - \$1{,}185.13) \approx -\$1{,}171$ a month; pay-off $3 \times \$990 = \$2{,}970$ a month.

Answer: Neither path wins everything. With flat values the pay-off path has more net worth and four times the cash flow; with steady appreciation the grow path ends richer; in a bad year the pay-off path keeps paying while the grow path needs about $14,000 a year from reserves.

Example 3. In this example, an owner adds $500 a month of extra principal to one $187,500, 6.5%, 30-year loan from the first month. How much sooner is it paid off, and how much interest is saved? What return does paying off a house earn in the Rental worksheet?

Show solution

1. Scheduled: 360 payments of $1,185.13; total interest $360 \times \$1{,}185.13 - \$187{,}500 \approx \$239{,}146$.
2. With $1,685.13 a month, an amortization spreadsheet shows payoff in 171 months (about 14¼ years) with about $100,442 of interest.
3. Interest saved: $\$239{,}146 - \$100{,}442 \approx \$138{,}704$; time saved about 15¾ years.
4. Return on a payoff (new loan): $\dfrac{12 \times \$1{,}185.13}{\$187{,}500} = \dfrac{\$14{,}221.56}{\$187{,}500} \approx 7.6\%$ a year of added cash flow.

Answer: Paid off about 15¾ years early with about $138,700 less interest. Eliminating the payment adds about 7.6% a year in cash flow on the payoff — a certain return, but the money is no longer liquid.

PRACTICE

1. Easy What is the difference between a fully amortizing loan and a balloon loan?

   Show answer

   A fully amortizing loan's payments repay the whole balance by the end of the term; a balloon loan leaves a large balance due at maturity that must be paid or refinanced.

2. Easy In a rental debt snowball, which loan gets the extra money first, and what happens when it is paid off?

   Show answer

   The smallest balance first; when it is paid off, that property's full NOI (its old payment plus its cash flow) is added to the snowball for the next loan.

3. Easy A free-and-clear rental has NOI of $1,450 a month. What is its cash flow?

   Show answer

   $1,450 a month — with no debt service, all NOI is cash flow (before income taxes).

4. Medium Three loans have balances of $62,000, $118,000 and $95,000. In what order does the snowball attack them?

Show answer

$62,000, then $95,000, then $118,000 — smallest balance first.

5. Medium Savings are $1,500 a month and two rentals each produce $200 of cash flow. What is the first snowball? After the first loan (payment $1,050) is paid off, what is the next one?

Show answer

First: $\$1{,}500 + 2 \times \$200 = \$1{,}900$. Next: $\$1{,}500 + (\$1{,}050 + \$200) + \$200 = \$2{,}950$.

6. Medium Paying off a $150,000 loan eliminates a $1,000 monthly payment. What yearly return on the payoff does that represent?

Show answer

$12 \times \$1{,}000 \div \$150{,}000 = 8\%$ a year of added cash flow.

7. Medium Why should reserves be full before an owner prepays principal?

Show answer

Prepaid principal is locked in the property and the required payment does not drop until the loan is paid off; without reserves, a vacancy or repair could force the owner to miss payments or sell despite large equity.

8. Hard In this example, six leveraged houses each have NOI of $1,300 and payments of $1,150. If NOI falls 30%, what is the portfolio's monthly cash flow? Compare three free-and-clear houses with the same NOI.

Show answer

Leveraged: $6 \times (0.70 \times \$1{,}300 - \$1{,}150) = 6 \times (\$910 - \$1{,}150) = -\$1{,}440$ a month. Free and clear: $3 \times \$910 = \$2{,}730$ a month.

9. Hard Give one argument a careful leverage investor would make and one a pay-off investor would make, each with a number from the worked examples.

Show answer

Leverage: with 3% appreciation, the six-house path reached about $1.74 million of net worth versus $1.45 million. Pay-off: in a year with NOI down 25%, the paid-off path still produced $2,970 a month while the leveraged path lost about $1,171 a month.

10. Hard An owner can prepay a 7% rental loan or keep the money in a savings account earning, in this example, 4%. Compare the returns and name one reason she might still keep some in savings.

Show answer

Prepaying earns a certain 7% (interest avoided) versus 4% — a 3-point advantage before taxes. She should still keep her full reserves in savings because cash is liquid and the house's equity is not.

11. Challenge Explain sequence risk to a grandparent who owns six mortgaged rentals and plans to retire on the cash flow next year. Write three sentences.

Show answer

The danger is not only how much the portfolio is worth on average but what happens if a bad year comes right when you depend on the rent. With six mortgages, a modest drop in rents or a few vacancies can turn the income negative just when there is no paycheck to cover it. Paying off some loans, or selling some houses to pay off others before retiring, trades some upside for income that survives a bad year.

12. **Challenge** Write a fair, four-sentence summary of the Dave Ramsey view and the careful-leverage view, ending with how a family should decide.

Show answer

The Ramsey view holds that debt adds risk and stress, so rentals should be bought with cash or paid off quickly, accepting slower growth for safety and freedom. The careful-leverage view holds that modest, long-term fixed-rate debt lets an investor own more property sooner and build more wealth if the deals are sound and reserves are strong. Both views agree that reckless debt ruins investors and that numbers must be run honestly. A family should model both paths with its own numbers, test a bad year, consider its age, income stability and convictions, and choose together.

COMMON MISTAKES

- Comparing paths only by net worth with appreciation. Also compare cash flow, debt and a bad year.
- Prepaying principal with empty reserves. Equity is not cash; fill reserves first.
- Expecting a lower payment after prepaying. The required payment stays the same until the loan is gone unless the lender recasts it.
- Taking short or balloon debt to buy faster. The 1930s showed that loans needing refinancing can fail exactly when credit disappears.
- Treating the choice as purely mathematical. Age, income stability, goals and convictions about debt are legitimate parts of the decision.
- Assuming you can always borrow against equity in a crisis. Lenders tighten when times are bad; plan without that option.

> **Make it a game · Snowball Race.** Each player gets three loan cards (balances $40,000, $65,000 and $90,000) and $2,000 of monthly "extra" in play money. Each round is one year: roll a die to set that year's cash flow per house ($100 × the roll), add $24,000 of savings, and pay down the smallest loan. Paid-off houses add $1,300 a month to your snowball. Event cards — vacancy, roof, rate shock — cost money and slow you down. First player to burn all three loan cards wins; others must say how many years they have left.

> **Scripture.** “Owe no man any thing, but to love one another: for he that loveth another hath fulfilled the law.” (Romans 13:8, KJV)
>
> Paul tells the Romans to leave no obligation unpaid except the debt of love, which is never finished. Christians have long discussed whether the verse forbids all borrowing; at the least, it calls borrowers to take debt seriously and pay every dollar owed on time. A family deciding between paying off rentals and growing with leverage should weigh this verse, Proverbs 22:7 and its own circumstances honestly and together.

10.4 Hard Lessons: Case Studies of Deals Gone Wrong

OBJECTIVES

- Explain the 1920s Florida land boom and bust — binders, speculation on resale, the freight embargo, the blocked harbor and the 1926 hurricane — and the lessons it holds for leverage and speculation.
- Analyze six composite teaching cases — the over-leveraged BRRRR, the flip that ran long, the market that turned, the bad-tenant year, the deferred-maintenance surprise and the partnership without a contract — and identify what the numbers showed beforehand.
- Rework a failed flip and a failed BRRRR in the Deal Analyzer, quantifying how time, sale price, appraisal and rent assumptions changed the result.
- Compute the cash needed to survive a bad-tenant year and to sell a property after values fall, and connect each to reserves and down payment.
- Conduct a written pre-mortem on a deal-binder property and name the specific safeguards — tests, inspections, contracts and reserves — that would prevent each failure.

> **Warm-up.** Think of a time you were sure something would go well and it did not — a project, a game, a plan. In five minutes, write what you assumed, what actually happened, and whether there was a warning sign you ignored. Then write one sentence about what you would check first next time. You will do the same thing with six real-world patterns of failed deals.

WATCH

What Are The Most Common Mistakes New Real Estate Investors Make? [#AskBP 048]

BiggerPockets · 10:34

https://www.youtube.com/watch?v=hnKDrUr5I3g

> **WHEN TO WATCH**
> Watch after the third core idea; list all ten mistakes he names, then mark which ones appear in this lesson's six composite cases.

BACKUP VIDEO

Forget Big: Make Your Rental Portfolio Antifragile

Coach Carson · 19:52

https://www.youtube.com/watch?v=Wfjna4rcW3A

Watch 0:00–15:40 after the sixth core idea; for each section (debt management at 6:45, the small and mighty portfolio at 9:30, personal safety nets at 12:18) write which composite case it would have prevented. Skip the community invitation at the end.

KEY TERMS

speculation

Buying mainly in the hope of reselling at a higher price soon, rather than for income or use the property produces.

binder

In the 1920s Florida boom, a small deposit that reserved a lot until a formal contract and payment were due; binders were often resold before the first payment.

composite case

A teaching case built from common patterns rather than from one real person's story; names and details are invented, and the lessons are real.

pre-mortem

An exercise done before a decision: imagine the deal has failed, list every reason it might have failed, and add a safeguard for each.

negative equity

Owing more on a property than it is worth after selling costs; also called being "underwater."

deferred maintenance

Repairs and replacements a previous owner postponed, which become the new owner's cost, often sooner and larger than expected.

sewer scope

A camera inspection of the sewer line from the house to the street, used to find cracks, roots and collapses before purchase.

holding costs

Taxes, insurance, utilities, loan interest and other costs that continue every month a property is held, especially while vacant or under renovation.

appraisal gap

The difference between the value an investor expected and the value an appraiser supports, which can leave cash trapped in a BRRRR or kill a sale.

confirmation bias

The tendency to notice evidence that supports what we already want to believe and to discount evidence against it.

CORE IDEAS

The story. In the early 1920s Florida seemed to sell itself. New roads and rail lines brought visitors south; developers drained swamps and platted subdivisions with Spanish names; lots in Miami and up the coast changed hands again and again at higher prices. Buyers often paid only a small deposit — a **binder** — and many sold the binder before the first real payment was due, so "binder boys" on Miami street corners traded lots they had never seen. Prices were set not by rents or crops but by the expectation that someone would pay more next month. By the end of 1925 the strain showed. The railroads, choked with freight, embargoed nonessential shipments that fall; in January 1926 a large sailing ship, the *Prinz Valdemar*, capsized at the mouth of Miami's harbor and blocked it for weeks; and new buyers simply stopped arriving. Prices sagged through 1926, and in September a powerful hurricane struck Miami. The boom was over well before the national crash of 1929.

How they figured it out. Looking back, the warning signs were plain. Most buyers were betting on resale, not on income; their small binders created enormous leverage; and the whole market depended on a steady stream of new buyers and on transportation, credit and weather staying favorable. When any one of those failed,

there was no income underneath to hold prices up, and owners with heavy obligations were forced to sell into a falling market. Banks that had lent on inflated land failed in the years that followed. Lawmakers later added protections for buyers of subdivided land, including the federal Interstate Land Sales Full Disclosure Act of 1968, which requires disclosure for many lots sold across state lines. But the deeper lesson is the one this whole course has taught: a property should be bought for what it can reliably earn, with reserves for the bad year, not for what someone else might pay for it soon.

The big idea. Investors learn the most from failure, and the cheapest failures to learn from are other people's. The cases in this lesson are **composite teaching cases**: each is built from patterns that experienced investors, lenders and property managers describe again and again, and every name and detail is invented. None is the story of a real person. What makes them useful is that in every case *the numbers warned beforehand* — in the Deal Analyzer's stress test, in the 70% rule, in a skipped inspection or a missing contract. As you study them, practice humility. Each investor in these cases was intelligent and hard-working; most fell to **confirmation bias**, wanting the deal so much that they explained away the warnings. A habit of the **pre-mortem** — imagining the failure before you buy — is the best defense.

Case 1, the over-leveraged BRRRR (composite). "Dan" bought a tired house for $160,000 cash, spent $50,000 on rehab and $4,000 on closing and $3,000 on holding costs, expecting a $290,000 appraisal and $2,300 rent. The appraisal came in at $255,000; at 75% loan-to-value, $30,750 of his cash stayed trapped instead of $4,500, and the house rented for $2,100, so even after the refinance it lost about $106 a month. His own projection, run honestly, had shown about −$140 a month even at full value: the deal never worked on paper. **Case 2, the flip that ran long** (composite). "Maria" paid $190,000 for a house with a $300,000 after-repair value and a $50,000 rehab; the 70% rule said her maximum offer was $160,000. Projected profit at six months was about $7,400 — thin already. Permits and a sewer repair stretched the job to ten months, the market cooled, and she sold for $285,000, losing about $16,800. **Case 3, the market that turned** (composite). A buyer put 10% down on a $300,000 rental; values fell 20% to $240,000, leaving him owing $270,000 — $30,000 underwater before selling costs.

Case 4, the bad-tenant year (composite). A landlord skipped her written screening criteria for a pleasant applicant who "just needed a chance." Three months of rent

went unpaid; the lawful eviction through the courts took time and about $2,500 in filing and attorney costs; the unit needed $3,000 of repairs beyond the deposit and a month to re-rent. A house that normally cash-flowed about $2,400 a year lost about $8,500. The lesson is not to distrust tenants — most pay faithfully — but to apply written criteria to everyone, follow the law exactly and keep reserves. **Case 5, the deferred-maintenance surprise** (composite). A buyer waived the sewer scope to win a bidding war. Within eighteen months he replaced a collapsed sewer line for $12,000 and a twenty-five-year-old roof for $11,000. His Rental worksheet had used 3% CapEx "because the house looked fine." **Case 6, the partnership without a contract** (composite). Two friends bought a duplex on a handshake. When a $15,000 repair came due, one could not pay; neither had agreed on capital calls, buyouts or an exit. The friendship ended in court, and the duplex was sold at a discount.

Look at the cases together and the same safeguards appear. Run the stress test and believe it. Use comps for rent and after-repair value, not hopes. Respect the 70% rule and the full flip worksheet, including two extra months and a 5% lower sale price. Put enough money down that a 20% drop in value does not leave you unable to sell or refinance. Keep reserves of several months of PITI, and a CapEx fund based on the real age of the roof, furnace, water heater and sewer line. Never waive key inspections. Apply written screening criteria to every applicant and follow your state's landlord–tenant law. Sign a partnership agreement before you sign a purchase contract. Proverbs warns that "he that maketh haste to be rich shall not be innocent"; nearly every case here began with a hurry — to win a bidding war, to repeat a BRRRR, to be in the market before prices rose further. Walking away is often the most profitable decision an investor ever makes.

Run the numbers. Each composite case can be rebuilt in the Deal Analyzer, and doing so is the point of this lesson. Case 1 is a BRRRR worksheet with the appraisal changed from $290,000 to $255,000 and the rent from $2,300 to $2,100. Case 2 is the Fix & flip worksheet with months changed from 6 to 10 and ARV from $300,000 to $285,000. Case 4 is the Rental worksheet with vacancy raised to a third of the year and $5,500 of extra costs in Other expenses. Case 5 is CapEx raised from 3% to a figure built from component ages. In every case, the stress-test row or a single honest input would have shown the danger before purchase. The classic mistake underneath them all is believing the best-case column and treating the stress test as a formality.

PICTURE STUDY



Billboard for the Sale of Subdivision Real Estate Lots, Florida, Unknown photographer, December 1922 · Photograph · State Archives of Florida (via the World Digital Library)

Image: Wikimedia Commons, public domain

This photograph was taken in December 1922, a few years before the Florida land boom reached its peak, and is held by the State Archives of Florida. The billboard advertises Altos del Mar, an oceanfront subdivision at the north end of Miami Beach offered by Tatum Bros. Company, Miami developers of the era. The sign promises everything a buyer might want — ocean, water, lights, paved streets and "easy terms" — on land where the streets and lights did not yet exist. It opens this lesson because it shows the boom in a single frame: real land, real promises and a price set by hope.

Look closely

- Read the side panels. Which promises describe what exists today, and which describe what the developers planned to build?
- Find the words "easy terms." Small payments made it easy to buy — and easy to buy more than one could afford.
- Look at the ground around the sign. There are no houses, streets or tenants; nothing on the lot yet produced income.
- Notice the two men in suits. Salesmen and buyers like these crowded Miami's streets in 1925, trading binders on lots they had never visited.

Talk about it

1. If you had been offered one of these lots in 1925, what three questions would you have asked before paying a binder?
2. Which of this lesson's six composite cases shares the most with the Florida boom, and why?
3. Proverbs 28:20 warns that he who makes haste to be rich shall not be innocent. Why does hurry so often lead good people into poor and even dishonest decisions?

PROJECT

The Pre-Mortem

You will choose the deal-binder property you like best and imagine that, two years after you bought it, it has failed badly. Working backward, you will write the most likely story of the failure, rebuild it in the Deal Analyzer, and add a specific safeguard for every cause. Then you will decide whether the property still deserves a "buy" verdict.

You will need

- Your favorite analyzed property from the deal binder, with its printed worksheet
- The Deal Analyzer (the worksheet that fits the strategy: Rental, House hack, BRRRR or Fix & flip)
- The six composite cases and the safeguards list from this lesson
- Your notebook and a parent or mentor to play the skeptic

Steps

1. Write the headline of the failure as if it were two years from now (for example, "Duplex sold at a loss after rents fell and the roof failed").
2. List at least eight possible causes, using every composite case as a prompt: leverage, time, appraisal, market, tenants, maintenance, partners, insurance, rates, your own hurry.
3. Pick the three most likely causes. Rebuild each in the Deal Analyzer by changing the inputs that cause would change, and print the results.
4. Compute two survival numbers: the reserves needed to survive the worst single year you modeled, and the cash needed to sell if values fell 20% (loan balance plus selling costs minus the lower value).
5. For every cause, write one safeguard you would put in place before buying: an inspection, a lower offer, a larger down payment, a reserve target, a written criterion or a contract clause.
6. Have your skeptic read the list aloud and challenge it; add anything you missed.

7. File the printouts and pre-mortem in your deal binder with a one-paragraph verdict: buy with the safeguards, negotiate to a stated price that absorbs the risks, or walk away.

INVESTOR'S NOTEBOOK

1. Flashcards: speculation, binder, composite case, pre-mortem, negative equity, deferred maintenance, sewer scope, holding costs, appraisal gap, confirmation bias.
2. Draw a six-row table — one row per composite case — with columns WHAT WENT WRONG · WHAT THE NUMBERS SHOWED BEFOREHAND · THE SAFEGUARD.
3. Trap list: hope is not a comp · the stress test is not a formality · never waive the inspection to win · thin flip profit + delay = loss · screen everyone by the same written criteria · sign the partnership agreement first.

KEY FORMULAS

$$\text{Flip profit} = \text{ARV} - (\text{price} + \text{closing} + \text{rehab with contingency} + \text{holding} + \text{interest} + \text{points} + \text{selling})$$

$$\text{Cash left in (BRRRR)} = \text{cash in} - (\text{ARV} \times \text{LTV} - \text{refinance closing})$$

$$\text{Equity after a drop} = \text{new value} - \text{loan balance} - \text{selling costs}$$

$$70\%\text{ rule maximum offer} = \text{ARV} \times 0.70 - \text{rehab}$$

From history. The Florida bust had a quiet aftermath: many subdivisions platted during the boom sat empty for decades, their sidewalks and street signs overgrown, until the population growth after World War II finally filled some of them. Lots bought at the peak in 1925 sometimes did not regain their prices for a generation. Owners who had paid cash could wait; owners who had borrowed often lost their land for unpaid taxes or loans during the long wait.

Example 1. Composite case 2. In the Fix & flip worksheet: ARV $300,000, price $190,000, buyer closing 2%, rehab $50,000 with 10% contingency, 85% of the price and 100% of rehab financed at 11% with 2 points, holding $600 a month, selling costs 8%. Find the 70% maximum offer and the profit at 6 months, then at 10 months with a sale at $285,000.

Show solution

1. 70% rule: $\$300{,}000 \times 0.70 - \$50{,}000 = \$160{,}000$ — she paid $30,000 over it.
2. Fixed costs: closing $3,800; rehab with contingency $55,000; loan $0.85 \times \$190{,}000 + \$55{,}000 = \$216{,}500$; points $4,330.
3. Six months: interest $\$216{,}500 \times 0.11 \div 12 \times 6 = \$11{,}907.50$; holding $3,600; selling $24,000; total cost $292,637.50; profit $\$300{,}000 - \$292{,}637.50 = \$7{,}362.50$.
4. Ten months at $285,000: interest $19,845.83; holding $6,000; selling $22,800; total cost $301,775.83; profit $\$285{,}000 - \$301{,}775.83 = -\$16{,}775.83$.

Answer: A thin $7,362.50 projected profit became a loss of about $16,776. Four extra months and a 5% lower price — both ordinary — erased it. The 70% rule warned her by $30,000.

Example 2. Composite case 1. In the BRRRR worksheet: price \$160,000 cash, closing \$4,000, rehab \$50,000, 6 months of holding at \$500, refinance at 75% LTV at 7.25% for 30 years with \$5,000 closing; operating expenses at the worksheet's defaults. Compare the plan (ARV \$290,000, rent \$2,300) with what happened (ARV \$255,000, rent \$2,100).

Show solution

1. Cash in: $\$160{,}000 + \$4{,}000 + \$50{,}000 + \$3{,}000 = \$217{,}000$.
2. Plan: loan $0.75 \times \$290{,}000 = \$217{,}500$; cash out $\$217{,}500 - \$5{,}000 = \$212{,}500$; cash left in \$4,500; payment \$1,483.73; NOI at \$2,300 rent \$16,121; cash flow about $-\$140$ a month.
3. Actual: loan $0.75 \times \$255{,}000 = \$191{,}250$; cash out \$186,250; cash left in \$30,750; payment \$1,304.66.
4. Actual NOI at \$2,100 rent: \$14,380; cash flow $\$14{,}380 - 12 \times \$1{,}304.66 \approx -\$1{,}276$ a year, about $-\$106$ a month; DSCR about 0.92.

Answer: The low appraisal trapped \$30,750 of his cash, and the house loses about \$106 a month. Even the plan lost money — the deal needed a lower price or a higher rent before he ever bought it.

Example 3. Composite case 4. A house rents for $1,800 a month with the Rental worksheet's default expenses (taxes $2,600, insurance $1,300, vacancy 6%, repairs 6%, CapEx 7%, management 9%) and P&I of $780 a month. In the bad year, 3 months of rent go unpaid, the unit sits empty 1 month after the lawful eviction, and $5,500 of extra costs arrive ($2,500 court and attorney, $3,000 damage beyond the deposit). Find normal and bad-year cash flow.

Show solution

1. Normal: GSI $21,600; vacancy $1,296; EGI $20,304; expenses $2,600 + $1,300 + $2,808 + $1,827.36 = $8,535.36; NOI $11,768.64; cash flow $11,768.64 − $9,360 = $2,408.64.
2. Bad year in the worksheet: vacancy $4 \div 12 = 33.3\%$ ($7,200), Other expenses $5,500 ÷ 12 = $458.33 a month.
3. EGI $14,400; expenses $2,600 + $1,300 + $5,500 + $2,808 + $1,296 = $13,504; NOI $896.
4. Cash flow $896 − $9,360 = −$8,464. Swing from normal: $2,408.64 − (−$8,464) ≈ $10,873.

Answer: The year swings from about +$2,409 to about −$8,464 — nearly $11,000 that only reserves can cover. Consistent written screening and lawful process reduce the odds; reserves survive the rest.

PRACTICE

1. Easy What is a composite teaching case, and why does this lesson use them?

   Show answer

   A case built from common patterns with invented names and details, not one real person's story. It teaches real lessons without exposing or blaming anyone.

2. Easy What was a "binder" in the 1920s Florida boom, and why did it add risk?

   Show answer

   A small deposit that reserved a lot until a formal contract; binders were resold for profit before payments were due, giving buyers great leverage on a market that depended on ever-higher prices.

3. Easy Define a pre-mortem.

Show answer

Before deciding, imagine the deal has already failed, list every reason it might have failed and add a safeguard for each.

4. Medium A flip's ARV is $260,000 and its rehab $45,000. What is the 70% maximum offer? An investor pays $170,000; by how much is he over?

Show answer

$\$260{,}000 \times 0.70 - \$45{,}000 = \$137{,}000$; he is $33,000 over.

5. Medium A flip loan of $200,000 at 12% runs 4 months longer than planned. How much extra interest is owed? Add $700 a month of holding costs.

Show answer

Interest $\$200{,}000 \times 0.12 \div 12 \times 4 = \$8{,}000$; holding $2,800; total $10,800.

6. Medium A BRRRR's cash in is $180,000. At 75% LTV with $4,000 refinance closing, how much cash is left in if it appraises at $240,000? At $220,000?

Show answer

At $240,000: loan $180,000, cash out $176,000, left in $4,000. At $220,000: loan $165,000, cash out $161,000, left in $19,000.

7. Medium Name three safeguards that would have prevented composite case 5 (the deferred-maintenance surprise).

Show answer

A sewer scope and full inspection before purchase; a CapEx estimate built from the ages of the roof, sewer, furnace and water heater; and an offer price or seller credit that accounted for the near-term replacements.

8. Hard Composite case 3: 10% down on $300,000; values fall 20%; selling costs are 8% of the sale price. How much cash must the owner bring to sell (ignore principal paid)?

Show answer

New value $240,000; selling costs $19,200; net $220,800; loan $270,000. He must bring $\$270{,}000 - \$220{,}800 = \$49{,}200$.

9. Hard In composite case 3, how much would the owner need to bring if he had put 25% down instead?

Show answer

Loan $225,000; net sale $220,800; he would bring $4,200 — and with positive cash flow he might not need to sell at all.

10. Hard Why is “the tenant seemed nice, so I skipped the criteria” both a financial and a legal risk?

Show answer

Financially, skipping criteria raises the chance of nonpayment and damage. Legally, applying criteria to some applicants and not others invites fair-housing claims; written criteria must be applied the same way to everyone.

11. Challenge In the bad-tenant worked example, what operating reserve would have covered the year without new debt? Express it in months of the property’s PITI if taxes and insurance add $325 a month to the $780 P&I.

Show answer

The year lost about $8,464 of cash flow. PITI $= \$780 + \$325 = \$1{,}105$; $\$8{,}464 \div \$1{,}105 \approx 7.7$ months. A six-month reserve would nearly cover it, and normal cash flow from other properties would help.

12. Challenge Write a four-sentence lesson from the Florida boom for a friend excited about a hot market today.

Show answer

In 1925 Florida buyers paid rising prices because they expected someone to pay even more, not because the land earned income. When transportation, credit and weather turned, there was nothing underneath the prices and leveraged buyers were forced to sell. A property bought for its reliable income, with modest debt and reserves, can wait out a falling market. Before buying in any hot market, run the deal at 0% appreciation and walk away if it only works when prices rise.

COMMON MISTAKES

- Buying on expected resale instead of income. Run every rental at 0% appreciation; speculation is how booms end in busts.

- Ignoring the 70% rule because “this market is different.” Thin flip profits disappear with ordinary delays and price cuts.
- Planning a BRRRR on a hoped-for appraisal and rent. Use comps, and make sure the deal cash-flows on a conservative appraisal.
- Putting too little down. A 20% decline in value can leave a 10%-down owner unable to sell or refinance.
- Waiving inspections or skipping screening criteria to save time or win a deal. Both trade a small certain cost for a large possible one.
- Partnering without a signed agreement. Settle capital calls, buyouts and exits before the purchase.

Make it a game · Spot the Warning. One player reads a deal card aloud — a price, a rent, a rehab, a loan and one hidden flaw (“roof is 24 years old,” “appraisal assumed $40,000 too high,” “no partnership agreement,” “seller’s rent is $300 above comps”). Others have one minute to write the warning sign and the safeguard. Correct warning: 1 point; correct safeguard: 1 point; correctly saying WALK AWAY on a deal that cannot be fixed: 2 points. Rotate readers through twelve cards; highest score wins and must explain the hardest card.

Scripture. “A faithful man shall abound with blessings: but he that maketh haste to be rich shall not be innocent.” (Proverbs 28:20, KJV)

Solomon sets faithfulness against haste. Nearly every failed deal in this lesson began with hurry — to win, to repeat, to get in before prices rose — and hurry pushed good people to ignore warnings, cut corners or shade the truth. The faithful investor is content to grow slowly, check every number and walk away when the deal is not right.

10.5 Capstone: Analyze, Defend and Present a Real Deal

OBJECTIVES

- Carry one real public listing through the full analysis: rent and sale comparables, a line-by-line expense build, a pretend financing quote and the correct Deal Analyzer worksheet.
- Stress-test the deal and solve backward for the offer price that meets a stated cash-flow or DSCR target.
- Identify the deal's main risks and write an exit plan for each, including when to walk away.
- Write a two-page investment memo with a clear verdict — buy, negotiate to a stated price, or walk away — defended with numbers.
- Deliver a 10-minute presentation to a panel of adults, answer their questions honestly, and reflect on the stewardship of property and of the people who live in it.

> **Warm-up.** Write down the one real listing in your deal binder you would most like to own. In five minutes, list every number you would need to defend buying it to a skeptical banker — and put a check mark beside each one you already have from comparables or public records, not from the listing agent's description. The unchecked items are your capstone to-do list.

WATCH

How to Analyze a Real Estate Deal LIVE w/ Brandon Turner

BiggerPockets · 42:02

https://www.youtube.com/watch?v=oBsDXjGzSG0

> **WHEN TO WATCH**
> Watch the first 25 minutes as a model of a live analysis — choosing a listing, estimating rent, building expenses and reading the result. He uses a different calculator; do the same steps in the School Launch Deal Analyzer and notice where his assumptions differ from yours.

BACKUP VIDEO

What's the best way to give a presentation?

TED-Ed · 8:07

https://www.youtube.com/watch?v=1sOgYNgq88E

Watch while preparing your presentation; outline the planning steps it recommends, then build your ten-minute plan using the time blocks in the fifth core idea.

KEY TERMS

investment memo

A short written case for or against a deal: the property, the market, the numbers, the risks, the offer and the verdict, with supporting worksheets attached.

subject property

The specific property being analyzed.

assumption

An input chosen by the analyst, such as rent, vacancy, repairs or interest rate, which should be supported by evidence and labeled.

sensitivity analysis

Changing one input at a time — rent, vacancy, rate, taxes and insurance, CapEx — to see how much the result depends on it.

back-solve

Working backward from a target result, such as a DSCR of 1.25 or a stated monthly cash flow, to the price or terms that would produce it.

exit strategy

The planned way out of an investment — hold, refinance, sell, or convert to another use — and the conditions that would trigger it.

panel

The group of at least two adults who hear the capstone presentation, ask questions and score it with the rubric.

margin of safety

The cushion between the price paid and a conservative estimate of value or income, so that ordinary errors and bad luck do not cause a loss.

verdict

The memo's conclusion: buy at the asking price, negotiate to a stated price, or walk away, with the reason.

stewardship

Managing property and money as a trust for which one is accountable, including fair and honest care for the people who live in or are affected by it.

CORE IDEAS

The story. In 1772 the English scientist and minister Joseph Priestley faced a hard choice: whether to leave his congregation in Leeds for a well-paid post in the household of a nobleman. He wrote to his friend Benjamin Franklin in London for advice. Franklin replied on September 19, 1772, that he could not say what Priestley should decide, but he could tell him *how*. Divide half a sheet of paper with a line into two columns, he wrote, one for reasons for and one for reasons against. Over three or four days, write down every reason as it occurs to you. Then weigh them: where a reason on one side equals one on the other, strike both out; where one reason equals two on the other side, strike out all three. When you find where the balance lies, wait a day or two more before deciding. Franklin called it "moral or prudential algebra," and it is still one of the best descriptions of a careful decision ever written.

How they figured it out. Franklin's method has a modern descendant in every bank and investment firm. A loan officer or analyst does not simply decide; he writes a memo, attaches the evidence, and presents it to a committee whose job is to ask hard questions — what must be true for this to work, and what happens if it is not? The investor Benjamin Graham, in *Security Analysis* (1934) and *The Intelligent Investor*

(1949), gave the idea a name that real estate investors use too: the **margin of safety**, the cushion between what you pay and a conservative estimate of what the investment is worth, so that ordinary mistakes do not turn into losses. Your capstone follows the same pattern: evidence, assumptions labeled, numbers worked by hand and in the Deal Analyzer, a written memo with a verdict, and a panel of adults who will ask you to defend every line.

The big idea. The capstone is one complete analysis of one real public listing, carried all the way to a decision. Choose a property that fits your buy box and a strategy — long-term rental, house hack, BRRRR or flip. Gather the evidence: three to five **rent comparables** and three **sale comparables** with adjustments; the county's tax record, with an estimate of taxes after reassessment; a landlord-insurance estimate; utilities the owner pays; and a **pretend financing quote** built from a lender's public rate page or an example your parent agrees is reasonable. Build every expense line, including repairs, CapEx from the ages of the major components, management and vacancy. Run the correct worksheet. Then do what most beginners skip: the **sensitivity analysis**, the **back-solve** for an offer price, and a written list of **risks** with an **exit strategy** for each. Every purchase in this course is pretend, and you contact no seller, agent or lender except with a parent present and permission.

The **investment memo** is two pages plus attachments. Page one: the property in a paragraph; the market in a paragraph (jobs, rents, price trends from public data); a table of the key numbers — price, rent, NOI, cash flow, cash-on-cash, cap rate, DSCR, cash needed and break-even occupancy; and your **verdict** in bold — buy at the asking price, negotiate to a stated price, or walk away. Page two: the stress test, the offer you would make and why, the three biggest risks with what you would do about each, and the exit plan (hold for how long, refinance or sell under what conditions). Attach the comparables, the expense build, the printed worksheet and the stress-test table. Write plainly. Label every example figure. Where you are unsure, say so and say how you would find out. A memo that recommends walking away, clearly defended, earns the same credit as one that recommends buying.

The **presentation** is ten minutes to a **panel** of at least two adults, followed by their questions. A good plan: one minute on the property (show photos from the public listing); two minutes on the market and comparables; three minutes walking through the worksheet; two minutes on the stress test and risks; one minute on the offer and verdict; and one minute of summary — what you would need to believe for

this deal to work. Practice aloud with a timer at least twice. During questions, answer what was asked, admit what you do not know ("I don't know; I would check the county permit records"), and never invent a number. Panelists score the presentation with the unit rubric: evidence, accuracy of the numbers, judgment and risk analysis, the memo, the presentation and the stewardship reflection. The rubric rewards clear thinking far more than polish.

Close the capstone, and the course, with a page on **stewardship**. Every number in your memo stands for something real: a house where a family will sleep, a neighbor who will live beside it, a seller with reasons of his own, workers who will be paid for repairs. A good investor serves all of them — by keeping the house safe and well maintained, by treating tenants fairly under the law and with kindness, by paying contractors promptly and honestly, by keeping his word to lenders and partners, and by refusing deals that only work if someone is misled. Jan Steen's burgher on his doorstep, approached by a poor woman and her child, is a picture of the question every owner faces: what do I owe the people around my property? Write your answer in a paragraph, and keep it in your binder for the day you buy your first real house.

Run the numbers. In this lesson's worked example, a real-looking listing at $285,000 renting for $2,250 fails: the Rental worksheet shows about −$240 a month, a DSCR of 0.83 and a break-even occupancy above 100%, and every stress-test row is worse. Back-solving with NOI held fixed shows the price would have to fall to about $206,000 for $150 a month of cash flow and to about $190,000 for a DSCR of 1.25. That is the most common capstone result, and it is a good one: the analysis has done its job by keeping you from a bad purchase. Check the classic mistakes one last time before you present: rent taken from the listing instead of comps; taxes at the seller's old assessment; CapEx at zero because the roof is new; management left out because you would self-manage; appreciation counted as cash flow; and a verdict that ignores your own stress test.

PICTURE STUDY



The Burgher of Delft and His Daughter (Adolf and Catharina Croeser on the Oude Delft), Jan Steen, 1655 · Oil on canvas · Rijksmuseum, Amsterdam

Image: Wikimedia Commons, public domain

Jan Steen (about 1626–1679) is best known for lively, crowded scenes of Dutch households, but this early painting is quiet and serious. For centuries it was called “The Burgher of Delft and His Daughter”; scholars now identify the sitters as Adolf Croeser, a prosperous grain merchant, and his daughter Catharina, on the steps of their house on the Oude Delft canal. A poor woman and her son approach him, perhaps asking for alms or for help with a letter. Steen leaves the outcome unpainted. The picture closes this course because it shows an owner on his own doorstep facing the question every property owner faces: what do I owe the people around me?

Look closely

- Look at the house behind the man. Its fine brick, stone steps and canal location show a prosperous owner — the kind of property this course has taught you to analyze.
- Find the poor woman and her son. Their worn clothing contrasts with the daughter’s fine dress; Steen places them on the same doorstep.
- Notice the letter in the man’s hand. Some think it is a petition the woman has brought him; he must decide what to do with it.

- Look at the canal and the church tower. Property, trade and faith all share the same street in this painting, as they do in a well-ordered town.

Talk about it

1. What do you think the man will do? What would you want him to do, and why?
2. Which of this course's lessons — fair housing, habitability, honest dealing, reserves, keeping your word — are ways an owner can answer the poor woman's question well?
3. Luke 14 tells the builder to count the cost before he begins. How is your capstone memo a way of counting the cost — and what costs to people, not just to money, should a Christian investor count?

PROJECT

The Capstone Deal: Memo and Presentation

This is the course's final project. You will choose one real public listing, analyze it completely, write a two-page investment memo with a verdict, and present it in ten minutes to a panel of at least two adults, who will question you and score your work with the Unit 10 rubric. Every purchase is pretend. Use only public listings and records, and contact no seller, agent, lender or landlord except with a parent present and permission.

You will need

- One real public listing that fits your buy box, with photos
- Rent comparables (3–5), sale comparables (3), the county tax record and FEMA flood-zone information
- The School Launch Deal Analyzer (the worksheet that fits your strategy) and a spreadsheet for the expense build and back-solve
- A printed copy of the Unit 10 rubric for each panelist, and a timer

Steps

1. Choose the listing and the strategy. Write two sentences on why it fits your buy box.
2. Build the evidence file: rent comps with adjustments, sale comps with an after-repair or as-is value, a tax estimate after reassessment, an insurance estimate, owner-paid utilities and a CapEx estimate from component ages.
3. Create a pretend financing quote (rate, term, down payment, closing costs) from a lender's public rate page or an example your parent approves, and label it as an example.
4. Run the correct worksheet — Rental, House hack, BRRRR or Fix & flip — and print it. Record the stress-test rows.
5. Back-solve the offer price for your cash-flow or DSCR target, list the three biggest risks with an exit plan for each, and decide your verdict.
6. Write the two-page memo (property, market, numbers table, verdict; stress test, offer, risks, exit plan), attach the evidence and worksheets, and add a

one-page stewardship reflection.

7. Rehearse the ten-minute presentation twice with a timer, then present to the panel, answer questions and collect their rubric scores. File everything, with the panel's comments, at the front of your deal binder.

INVESTOR'S NOTEBOOK

1. Flashcards: investment memo, subject property, assumption, sensitivity analysis, back-solve, margin of safety, exit strategy, verdict, panel, stewardship.
2. Draw Franklin's two-column sheet for your capstone deal: PRO on the left, CON on the right, at least six reasons on each side, with strike-throughs where reasons balance and your conclusion at the bottom.
3. Trap list for the night before you present: comps, not the listing · taxes after reassessment · CapEx even with a new roof · management even if self-managing · appreciation is not cash flow · believe your own stress test · "I don't know, and here is how I'd find out" is a good answer.

KEY FORMULAS

$$\text{NOI} = \text{EGI} - \text{operating expenses}; \quad \text{Cash flow} = \text{NOI} - \text{debt service}$$

$$\text{Cash-on-cash} = \frac{\text{annual cash flow}}{\text{cash invested}}; \quad \text{Cap rate} = \frac{\text{NOI}}{\text{price}}; \quad \text{DSCR} = \frac{\text{NOI}}{\text{debt service}}$$

$$\text{Break-even occupancy} = \frac{\text{operating expenses} + \text{debt service}}{\text{GSI}}$$

$$\text{Back-solve: maximum annual debt service} = \text{NOI} - \text{target cash flow} \quad \text{or} \quad \frac{\text{NOI}}{\text{target DSCR}}$$

From history. Joseph Priestley did take the position he had asked Franklin about, serving for several years as librarian and companion in the household of the Earl of Shelburne, and it was during those years, in 1774, that he isolated the gas we now call oxygen. Franklin's letter, meanwhile, has been reprinted for two and a half centuries as a model of decision-making. The two friends kept writing to each other through the American Revolution, even when their countries were at war.

Example 1. Capstone sample (Rental worksheet). In this example, a single-family listing asks $285,000. Rent comps support $2,250 a month. Inputs: closing $6,000; upfront repairs $4,000; 25% down; 7%, 30 years; vacancy 6%; taxes $3,300 (after reassessment); insurance $1,500; other $50 a month; repairs 6%; CapEx 7%; management 9%. Find the key results.

Show solution

1. Income: GSI $\$2{,}250 \times 12 = \$27{,}000$; vacancy $1,620; EGI $25,380.
2. Expenses: $\$3{,}300 + \$1{,}500 + \$600 + \$1{,}620 + \$1{,}890 + 0.09 \times \$25{,}380 = \$11{,}194.20$; NOI $14,185.80.
3. Loan $213,750; P&I $1,422.08; debt service $17,065.01; cash flow $\$14{,}185.80 - \$17{,}065.01 = -\$2{,}879.21$ (about $−$240 a month).
4. Cash invested $\$71{,}250 + \$6{,}000 + \$4{,}000 = \$81{,}250$; cash-on-cash -3.5%; cap rate $\$14{,}185.80 \div \$285{,}000 \approx 4.98\%$; DSCR 0.83.
5. Screens: 1% rule $\$2{,}250 \div \$289{,}000 \approx 0.78\%$ (fails); break-even occupancy $(\$11{,}194.20 + \$17{,}065.01) \div \$27{,}000 \approx 104.7\%$.

Answer: At the asking price the property loses about $240 a month, with a DSCR of 0.83 and a break-even occupancy above 100% — it could not pay its bills even if it were never vacant.

Example 2. Stress-test the sample and back-solve the offer price. Hold NOI at $14,185.80 (taxes assumed fixed) and keep 25% down at 7% for 30 years. Find (a) the stress-test results, (b) the price that gives $150 a month of cash flow and (c) the price that gives a DSCR of 1.25.

Show solution

1. (a) Monthly cash flow in the stress test: rent −10%: −$403; vacancy +5 points: −$342; rate +1 point: −$386; taxes and insurance +20%: −$320; CapEx +5 points: −$352.
2. (b) Allowed debt service: $14,185.80 − $1,800 = $12,385.80 a year, $1,032.15 a month. At 7% for 30 years that payment carries a loan of about $155,140; at 75% LTV the price is about $206,850.
3. (c) Allowed debt service: $14,185.80 ÷ 1.25 = $11,348.64 a year, $945.72 a month; loan about $142,150; price about $189,530.
4. Compare with the asking price: $206,850 is about 27% below $285,000.

Answer: Every stress row is negative. The price would need to be about $206,850 for $150 a month, or about $189,530 for a DSCR of 1.25 — far below what the sale comps support.

Example 3. Write the verdict. Suppose the sale comps support a value near $280,000. At an offer of $206,000 (25% down, 7%, 30 years, same NOI), compute cash flow, DSCR, cash-on-cash and the 1% rule, then choose: buy, negotiate to a stated price, or walk away.

Show solution

1. Loan $0.75 \times \$206{,}000 = \$154{,}500$; P&I $1,027.89; cash flow $\$14{,}185.80 - \$12{,}334.71 = \$1{,}851.09$ a year ($154 a month).
2. DSCR $\$14{,}185.80 \div \$12{,}334.71 \approx 1.15$; cash invested $\$51{,}500 + \$6{,}000 + \$4{,}000 = \$61{,}500$; cash-on-cash $\approx 3.0\%$.
3. 1% rule at the offer: $\$2{,}250 \div \$210{,}000 \approx 1.07\%$ (passes); cap rate $\approx 6.9\%$.
4. Judgment: even at an offer 26% below the comps, DSCR is below 1.25 and cash-on-cash only 3%; a seller is very unlikely to accept, and taxes might be reassessed differently at a lower price.
5. Verdict sentence: “Walk away. At the asking price the property loses about $240 a month; even at $206,000 it would barely meet my cash-flow goal and fail my DSCR test. I will keep it in my binder and watch for a price reduction below $195,000.”

Answer: Walk away, with a stated price at which you would reconsider. A clear, numbers-based walk-away is a successful capstone.

PRACTICE

1. Easy List the three possible verdicts in a capstone memo.

   Show answer

   Buy at the asking price, negotiate to a stated price, or walk away — each defended with numbers.

2. Easy Why does the capstone require rent comparables instead of the rent stated in the listing?

   Show answer

   The listing’s rent is the seller’s claim; comparables show what similar units actually rent for nearby, which is the evidence a lender or panel will trust.

3. **Easy** Describe Franklin's "prudential algebra" in two sentences.

Show answer

Write the reasons for and against a decision in two columns over several days, then strike out reasons of equal weight on opposite sides. Where the balance lies after the striking out shows the better choice, which you then let rest a day or two before deciding.

4. **Medium** In this example, GSI is $30,000, vacancy 5%, operating expenses $11,400 and debt service $14,800. Find NOI, cash flow and DSCR.

Show answer

EGI $28,500; NOI $17,100; cash flow $2,300; DSCR $17,100 ÷ $14,800 ≈ 1.16.

5. **Medium** Using problem 4, find break-even occupancy.

Show answer

($11,400 + $14,800) ÷ $30,000 ≈ 87.3%. The property must be occupied (and paying) about 87% of the year to cover all costs.

6. **Medium** NOI is $16,000. What is the maximum annual debt service for a DSCR of 1.25, and for $200 a month of cash flow? Which is stricter?

Show answer

DSCR 1.25: $16,000 ÷ 1.25 = $12,800. Cash flow $2,400: $16,000 − $2,400 = $13,600. The DSCR test is stricter (it allows less debt).

7. **Medium** Give a good answer to a panelist who asks, "What if the roof fails in year two?"

Show answer

State the roof's age and the CapEx reserve in the analysis, estimate the replacement cost, show how many months of reserves it would use, and say what you would do — for example, ask for a seller credit or price reduction now if the inspection shows little life left.

8. Hard In this example, a property's NOI is $18,000. You want a DSCR of 1.25 with a 7%, 30-year loan at 75% LTV. The payment on each $100,000 borrowed is $665.30 a month. Find the maximum loan and price.

Show answer

Maximum debt service $14,400 a year, $1,200 a month; loan $1,200 ÷ $665.30 × $100,000 ≈ $180,370; price $180,370 ÷ 0.75 ≈ $240,490.

9. Hard A capstone deal cash-flows $120 a month as entered but goes negative on four of five stress-test rows. What should the verdict say?

Show answer

It should say the deal has almost no margin of safety: ordinary changes in rent, vacancy, rate or costs turn it negative. The likely verdict is negotiate to a stated lower price that survives the stress test, or walk away.

10. Hard Your analysis assumes taxes stay at the seller's current $2,100, but the county reassesses at sale to about 1.2% of the price. On a $310,000 purchase, how does this change yearly cash flow?

Show answer

New taxes ≈ 0.012 × $310,000 = $3,720; cash flow falls by $1,620 a year ($135 a month). Always check how your county reassesses after a sale.

11. Challenge Write the three-sentence summary you would give a panel for the worked example's property.

Show answer

This $285,000 house would rent for about $2,250 based on five comparables, but with realistic expenses and a 7% loan it loses about $240 a month and has a DSCR of 0.83. Every stress-test row is worse, and the price would need to fall to about $190,000–$207,000 to meet my targets — far below its value. My verdict is to walk away and watch for a large price reduction.

12. **Challenge** Write a stewardship paragraph (four sentences) for your capstone property, naming at least three groups of people your ownership would affect.

Show answer

> Owning this house would make me responsible for the safety and fair treatment of the family who rents it, which means prompt repairs, honest dealing and following the law on screening, deposits and notice. It would affect the neighbors, who deserve a well-kept property and a tenant chosen carefully and fairly. The contractors who work on it deserve clear agreements and prompt payment, and my lender and any partner deserve my word kept. I want to own property only on terms that let me serve all of them well, which is one more reason to walk away from deals that do not work.

COMMON MISTAKES

- Using the listing's rent or the seller's pro forma instead of rent comparables.
- Leaving taxes at the seller's old assessment. Estimate taxes after reassessment at your purchase price.
- Skipping the stress test or explaining it away. A verdict must account for what the stress test shows.
- Writing a verdict without a stated price. "Negotiate" means a specific number backed by the back-solve.
- Treating walking away as failure. A clear, numbers-based walk-away is a successful analysis.
- Inventing numbers under questioning. Say what you do not know and how you would find it.

> **Make it a game · The Panel.** A family dress rehearsal. One player presents any deal from the binder in three minutes. Everyone else is a panelist holding three question cards: "Where did that rent come from?", "What happens if the rate is 1 point higher?", "Why this offer price?", "What did you leave out?", "Who does this deal serve besides you?" Each good answer (with a number or an honest "here's how I'd find out") earns a point; an invented number loses two. Rotate presenters. The highest scorer chooses dessert — and must present first next time.

Scripture. “For which of you, intending to build a tower, sitteth not down first, and counteth the cost, whether he have sufficient to finish it? Lest haply, after he hath laid the foundation, and is not able to finish it, all that behold it begin to mock him, Saying, This man began to build, and was not able to finish.” (Luke 14:28–30, KJV)

Jesus used the builder who counts the cost to teach about the seriousness of following him, and the picture fits every serious commitment. Your capstone is a cost count: every expense, every risk, every reserve, before the foundation is laid. Counting carefully, and walking away when the cost is too high, is not timidity but wisdom — and the most important costs to count include what we owe to the people our decisions affect.

UNIT 10

Building a Portfolio and the Capstone

You have spent a year learning to analyze one property at a time. This last unit asks the larger questions: how fast, with whom, with how much debt — and what could go wrong. You will learn why investors who survived 2008 kept **reserves**, how to set reserve targets and written tests for buying the **next door**, and how to pace a portfolio with a conservative ten-year plan. You will study **partnerships** — the money partner and the operating partner, the **preferred return** and the return of capital — and the 1946 orange-grove case that made raising money from passive investors a matter of **securities** law. You will compare two honest paths to a paid-off portfolio, growing with leverage or running a **rental debt snowball**, and test both against a bad year, with the case for careful debt and the case for owning free and clear presented side by side.

Then you will study failure on purpose: the 1920s Florida land boom, and six clearly labeled **composite teaching cases** of deals gone wrong, each rebuilt in the Deal Analyzer to show that the numbers warned beforehand. Finally comes the **capstone**: one real public listing analyzed from comparables to verdict, written up as an investment memo and defended in ten minutes before a panel of adults, who will score it with this unit's rubric. A careful walk-away earns as much credit as a buy. The year ends where it began — with property as a stewardship of homes and of the people who live in them.

PREREQUISITES

- Can complete any of the four Deal Analyzer worksheets and read its stress test (Units 3, 5, 6 and 7)
- Can compute NOI, cash flow, cash-on-cash return, cap rate and DSCR by hand (Unit 3)
- Can explain the risks of BRRRR and flips, and the landlord's duties under fair-housing and landlord–tenant law (Units 6–8)
- Has a deal binder of at least thirty analyzed properties, each with a verdict, and a written goal of "enough" from Lesson 1.4

MASTERY CHECKLIST

- ☐ I can compute a reserve target for a property and a portfolio and the months of saving needed for the next purchase.
- ☐ I can apply written next-door tests, including a portfolio DSCR, and compute the loan size a new property can carry at a target DSCR.
- ☐ I can compute partnership splits under a straight split, a preferred return and a return-of-capital-first waterfall.
- ☐ I can apply the Howey test and explain why raising money from passive investors calls for a securities attorney before any money is accepted.
- ☐ I can run a rental debt snowball and compare a grow path with a pay-off path on cash flow, net worth and a bad year.
- ☐ I can explain the 1920s Florida land bust and rebuild composite failed deals in the Deal Analyzer to show what the numbers warned.
- ☐ I can carry a real listing from comparables to a back-solved offer price and a written verdict with risks and an exit plan.
- ☐ I can present and defend a deal to a panel of adults, answer questions honestly and explain my duties as a steward of property and people.

OPTIONAL BOOKS AND RESOURCES FOR THIS UNIT

- **School Launch Deal Analyzer**: Free. Every lesson in this unit uses it: the Rental worksheet for the ten-year plan and the capstone, the BRRRR and Fix & flip worksheets for the composite cases, and the stress test for every verdict. Print the filled-in worksheet for your capstone memo. Ages 14 and up.
- **Investor.gov: Accredited Investors (U.S. Securities and Exchange Commission)**: Free, official. The SEC's plain explanation of exempt offerings under Regulation D and who counts as an accredited investor — background for Lesson 10.2's warning about raising money from others. Read it, then talk with a parent about why a securities attorney comes first. Ages 15 and up.
- **Investor.gov: Ponzi Scheme (U.S. Securities and Exchange Commission)**: Free, official. Red flags of investment fraud, including promised high returns with little risk — useful for Lessons 10.2 and 10.4 and for any real estate "opportunity" a friend offers you. Ages 14 and up.
- **Chad Carson, Retire Early with Real Estate (BiggerPockets Publishing)**: Optional book by a longtime small-property investor who teaches modest portfolios, careful debt and paying rentals off — a thoughtful companion to Lesson 10.3. Read it with a parent and compare its plans with your own ten-year plan. Ages 16 and up.
- **Brandon Turner, Rental Property Investing (BiggerPockets Publishing)**: Optional book, the newer edition of The Book on Rental Property Investing, covering deal analysis, financing and growing a rental portfolio in the BiggerPockets style. Use it as a second voice for the capstone and Lesson 10.1, and keep this unit's cautions about leverage beside it. Ages 16 and up.

Not required. Every project in this unit works without them. School Launch has no ties to these authors, publishers or companies.

LESSONS IN THIS UNIT

10.1 Scaling: Reserves, Pacing and the Next Door — 3 sessions of 50 minutes

10.2 Partners, Private Investors and Doing It Honestly — 3 sessions of 50 minutes

10.3 Paying Off Debt or Growing: Two Paths to a Paid-Off Portfolio

3 sessions of 50 minutes

10.4 Hard Lessons: Case Studies of Deals Gone Wrong — 3 sessions of 50 minutes

Unit 10 test

Closed notes; a basic calculator is allowed. Twenty four-choice questions, 5 points each, about two minutes per question — set a timer for 40 minutes. Show the arithmetic for every calculation question on scratch paper, choose the best answer, then check your work against the key. Aim for 80% or better, and rework every miss in your investor's notebook. Figures marked "in this example" are examples, not current rates, prices or rules.

1. **5 pts**
   In this example, a rental's PITI is $1,400 a month. The owner keeps six months of PITI plus a $5,000 CapEx fund. What is the reserve target?
   A. $8,400
   B. $6,400
   C. $13,400
   D. $19,400

2. **5 pts**
   Which is the strongest sign that an investor is ready to buy the next property?
   A. Reserves are full, every property has cash-flowed for a year, and the down payment comes from savings
   B. Prices are rising and she does not want to miss out
   C. A lender has pre-approved her for a larger loan
   D. She has a down payment if she uses her reserves

3. **5 pts**
   In this example, a portfolio's total NOI is $40,000 and total annual debt service is $36,000. What is the portfolio DSCR, and does it meet a 1.25 rule?
   A. 1.25; yes
   B. 0.90; no
   C. 1.33; yes
   D. 1.11; no

4. 5 pts

An investor decides he must buy another property this year and begins to approve deals he would have rejected last year. This is called:

A. Dollar-cost averaging

B. The buy-at-any-price trap

C. Forced appreciation

D. The 70% rule

5. 5 pts

In this example, a money partner contributes $50,000 with an 8% preferred return; yearly cash flow is $6,000; the rest is split 50/50. What does the money partner receive?

A. $5,000

B. $3,000

C. $4,000

D. $6,000

6. 5 pts

Under the Howey test, which arrangement is most likely a security?

A. Two brothers who buy a duplex together and share all decisions and work

B. A grandmother's single documented, secured loan to her grandson

C. Fifteen coworkers who each send $20,000 to a friend who alone will buy and run an apartment building

D. A couple who buys a rental with a bank mortgage

7. 5 pts

Net sale proceeds are $100,000. The money partner contributed $70,000 and the operator nothing. Capital is returned first, then profit split 50/50. What does the money partner receive?

A. $50,000

B. $85,000

C. $70,000

D. $100,000

8. 5 pts

Real estate syndications commonly rely on Regulation D in order to:

A. Avoid all disclosure to investors

B. Guarantee investors a fixed return

C. Turn passive investments into partnerships that are not securities

D. Qualify for an exemption from SEC registration, subject to rules on investors and offering methods

9. 5 pts

In a rental debt snowball, which loan receives the extra payments first?

A. The loan with the smallest balance

B. The loan with the largest balance

C. The newest loan

D. All loans equally

10. 5 pts

In this example, paying off a $160,000 loan eliminates a $1,200 monthly payment. What yearly return on the payoff does the added cash flow represent?

A. 7.5%

B. 12%

C. 9%

D. 1.2%

11. 5 pts

A 64-year-old owner of six mortgaged rentals plans to live on their cash flow. The main danger that paying down some loans would reduce is:

A. Inflation risk on her savings

B. The 1% rule

C. Depreciation recapture

D. Sequence risk — a bad year arriving just when she depends on the income

12. 5 pts

Why should reserves be full before an owner prepays mortgage principal?

A. Prepaying raises the interest rate

B. Prepaid principal is not available in an emergency, and the required payment does not fall until the loan is paid off

C. Lenders forbid prepayment until reserves are full

D. Reserves earn more than any loan costs

13. 5 pts

Which lesson does the 1920s Florida land boom teach most directly?

A. Oceanfront land always recovers its value quickly

B. Small deposits reduce risk

C. Prices based on expected resale rather than income can collapse when new buyers stop arriving

D. Hurricanes were the only cause of the bust

14. 5 pts

What is a composite teaching case?

A. A case built from common patterns with invented names and details, not one real person's story

B. A court case involving several investors

C. A real investor's confidential file

D. A case with two strategies combined

15. 5 pts

In this example, a flip's ARV is $280,000 and its rehab is $40,000. What is the 70% rule maximum offer?

A. $196,000

B. $240,000

C. $168,000

D. $156,000

16. 5 pts

In this example, a buyer put 10% down on a $250,000 rental. Values fall 15%. Ignoring principal paid, what is his equity before selling costs?

A. $25,000

B. −$12,500

C. $0

D. −$37,500

17. 5 pts

A pre-mortem asks the investor to:

A. Imagine the deal has failed and list every reason it might have, then add a safeguard for each

B. Review a deal only after it closes

C. Estimate the property's value at the owner's death

D. Compare a deal's mortgage with a competitor's

18. 5 pts

In this example, a property's NOI is $15,000. What is the maximum annual debt service for a DSCR of 1.25?

A. $18,750

B. $15,000

C. $12,000

D. $13,750

19. 5 pts

A capstone memo concludes, with full numbers, that the property loses money at any price the seller would likely accept. How should the panel score the verdict?

A. Lower, because no deal was found

B. Incomplete, because every capstone must recommend a purchase

C. Lower, unless the student assumed appreciation

D. Full credit for judgment, if the walk-away is clearly defended with the numbers

20. **5 pts**

During the capstone questions, a panelist asks for the property's sewer-line age, which the student did not research. The best response is:

A. Give a reasonable-sounding guess

B. Say that he does not know, explain how he would find out (inspection or sewer scope, permit records) and how it could change the offer

C. Say that sewer lines rarely fail

D. Change the subject to the cash flow

ANSWER KEY

1. C. 6 × $1,400 = $8,400, plus $5,000 = $13,400. Choice A leaves out the CapEx fund; choice D adds the CapEx fund twice.
2. A. The next-door tests are full reserves, proven cash flow and savings for the down payment. Fear of missing out (B) and borrowing capacity (C) are not tests, and using reserves (D) weakens every property she owns.
3. D. $40,000 ÷ $36,000 ≈ 1.11, below 1.25. Choice B divides the wrong way (debt ÷ NOI).
4. B. When the goal becomes buying rather than buying well, the analysis bends to fit the wish. A written buy box and fixed tests are the defense.
5. A. Preferred return 0.08 × $50,000 = $4,000; remaining $2,000 split $1,000 each; money partner $4,000 + $1,000 = $5,000. Choice C forgets his share of the remainder.
6. C. Pooled money from passive investors in a common enterprise, expecting profits from the promoter's efforts, has all the Howey elements. In A, both partners manage; B is a single documented loan; D involves no outside investors.
7. B. Return of capital $70,000; profit $30,000 split $15,000 each; money partner $70,000 + $15,000 = $85,000. A straight 50/50 split (A) would return less than he invested.
8. D. Regulation D provides exemptions from registration — not from securities law itself — with rules on who may invest, how offerings are made and what must be filed. It never permits guaranteed returns or hiding risks.
9. A. The snowball pays the smallest balance first; when it is gone, that property's whole NOI joins the payments on the next loan.
10. C. 12 × $1,200 = $14,400; $14,400 ÷ $160,000 = 9%. Choice D forgets to annualize.
11. D. With several mortgages, a modest drop in rents can turn income negative exactly when she has no paycheck. Fewer loans make the income survive a bad year.
12. B. Equity is not cash. Without reserves, a vacancy or repair could force missed payments or a sale despite large equity.
13. C. Binder buyers bet on resale with heavy leverage; when transportation, credit and buyers dried up — before the 1926 hurricane — there was no income underneath the prices.

14. A. Composite cases teach real lessons without telling or blaming any real person's story.
15. D. $280,000 × 0.70 − $40,000 = $196,000 − $40,000 = $156,000. Choice A forgets to subtract the rehab.
16. B. New value $250,000 × 0.85 = $212,500; loan $225,000; equity = −$12,500. Selling costs would make it worse.
17. A. The pre-mortem happens before the decision and turns imagined failures into specific safeguards: inspections, offer prices, reserves and contracts.
18. C. $15,000 ÷ 1.25 = $12,000. Choice A multiplies instead of dividing.
19. D. The course rewards judgment, not optimism. A clear, numbers-based walk-away is a successful analysis.
20. B. Honesty and a plan to find the answer show judgment. Inventing a number is the worst possible answer.

PORTFOLIO PIECE: DEAL BINDER, UNIT 10: THE PORTFOLIO PLAN AND THE CAPSTONE

Finish your deal binder with this unit's work: the conservative ten-year plan with reserve targets and next-door tests from Lesson 10.1; the partnership term sheet, split spreadsheet and Howey analysis from Lesson 10.2; the two-paths fifteen-year comparison and family discussion notes from Lesson 10.3; the pre-mortem with rebuilt worksheets from Lesson 10.4; and, at the front of the binder, the capstone from Lesson 10.5 — the evidence file, the printed Deal Analyzer worksheet and stress test, the two-page investment memo with its verdict, the stewardship reflection and the panel's scored rubrics and comments.

The capstone is presented to a panel of at least two adults. Each panelist scores the six criteria below from 1 to 4 (4 = the full-marks description is met; 3 = mostly met with small gaps; 2 = partly met; 1 = missing or seriously flawed), for a total out of 24; average the panelists' totals. A score of 21–24 is excellent, 17–20 good, 13–16 needs revision, and below 13 should be redone. A well-defended walk-away can earn full marks on every criterion.

LOOK FOR	WHAT IT MEANS
Evidence	Rent comps (3–5) and sale comps (3) are real, recent, similar and adjusted; taxes are estimated after reassessment; insurance, utilities and CapEx come from documented sources; every example figure is labeled; nothing relies on the seller's claims.
Accuracy of the numbers	The correct Deal Analyzer worksheet is used and printed; NOI, cash flow, cash-on-cash, cap rate, DSCR and break-even occupancy are correct and can be worked by hand when the panel asks; units and labels are clear.
Judgment and risk	The stress test is run and taken seriously; the offer price is back-solved from a stated target; the three biggest risks each have a specific safeguard or exit plan; the verdict — buy, negotiate to a stated price, or walk away — follows from the numbers.
Investment memo	Two clear pages plus attachments: property, market, key-numbers table, verdict in bold, stress test, offer, risks and exit plan; plain, honest writing that admits uncertainty and says how it would be resolved.
Presentation and questions	Ten minutes, well organized and rehearsed; visuals support the numbers; questions are answered directly; the student says "I don't

LOOK FOR	WHAT IT MEANS
	know, and here is how I would find out" rather than inventing a figure.
Stewardship	The reflection names the people the ownership would affect — tenants, neighbors, workers, lenders, partners — and explains specific duties to each (safe housing, fair and lawful treatment, prompt payment, kept promises), connecting them honestly to the decision.

COURSE EXAM

Midterm Exam

Covers Units 1–5. Time: 90 minutes.

Closed book and closed notes; a basic calculator only. This exam has fifty four-choice questions on Units 1–5, one point each. Take it in one sitting with a 90-minute limit — a little under two minutes a question — with a parent or proctor keeping time. Show the arithmetic for every calculation question on scratch paper: the formula, the numbers substituted and the answer. Use the Deal Analyzer's conventions throughout: repairs and CapEx are percents of scheduled rent, management is a percent of collected rent, and operating expenses never include the mortgage. Choose the one best answer and answer every question; there is no penalty for guessing. Figures marked "in this example" are examples, not current rents, rates, taxes or loan limits, and rules marked "as of 2026" are stated as the lessons teach them. To score the exam, divide the number correct by 50 and multiply by 100 for your percent; aim for 80% or better. Afterward, review every miss in your investor's notebook: write down the idea the question tested, rework the arithmetic, explain why the right answer is right and why your choice was wrong, and reread that lesson's "Run the numbers" paragraph.

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1. **1 pt** **Lesson 1.1**

   In this example, an investor puts $66,000 of cash into a $240,000 rental. In the first year it produces $1,100 of cash flow, $1,900 of principal paydown and a $1,300 tax benefit, and the house appreciates 3%. What is the first-year total return on the cash invested, and what is it if appreciation is zero?

   A. 17.4%, or 1.7% with no appreciation

   B. 17.4%, or 6.5% with no appreciation

   C. 15.5%, or 4.5% with no appreciation

   D. 4.8%, or 1.8% with no appreciation

2. 1 pt **Lesson 1.1**

A seller tells you, “Depreciation is free money — you deduct it every year and the IRS never asks for it back.” Which correction matches what this course teaches?

A. It covers the land and the building and is never taxed again once it is taken

B. It is cash the owner receives each year, so it belongs in the cash-flow line

C. It lowers taxable income now but is generally recaptured and taxed at sale

D. It may be claimed only by rentals that lose money, never by those that cash-flow

3. 1 pt **Lesson 1.2**

In this example, a rental leaves its owner $380 a month after PITI and small repairs. A tenant leaves and the unit sits empty one month: the $1,650 PITI is still due, utilities cost $150 and the turnover costs $1,100. About how many months of surplus does that one vacancy erase?

A. About 4.3 months

B. About 7.6 months

C. About 7.2 months

D. About 3.3 months

4. 1 pt **Lesson 1.2**

In this example, a $180,000 loan at 7% for 30 years has a principal-and-interest payment of $1,197.54 a month. The property’s cap rate is 6.8%. What is the loan constant, and what kind of leverage results?

A. 7.98%; positive leverage

B. 0.67%; positive leverage

C. 7.98%; negative leverage

D. 7.00%; no effect, since the cap rate ignores financing

5. 1 pt **Lesson 1.2**

Two families disagree. One will buy rentals only with cash after paying off its home; the other will use modest fixed-rate loans with large down payments, strong cash flow and deep reserves. How does this course treat the two plans?

A. The cash plan is foolish, because leverage always raises an investor's overall returns

B. The loan plan is wrong, because any amount of borrowing will eventually ruin an investor

C. Both are views wise people hold; run the numbers both ways and let the family decide

D. Neither choice matters much, because appreciation will rescue either plan in time

6. 1 pt **Lesson 1.3**

A friend says, "I'll hire a property manager, so my rental will be completely passive." Which reply is most accurate?

A. Yes; once a manager is hired, the owner has no remaining duties, decisions or costs to handle

B. No; a manager cuts the work, but the owner still oversees the manager and pays for repairs

C. Yes, but only for buildings of four or fewer units, which a manager can run alone

D. No; managers may not be hired for small rentals, so he will have to manage it himself

7. 1 pt **Lesson 1.3**

An investor plans to flip a house and says, "If it doesn't sell, I'll just rent it." What should she do before she buys?

A. Run the Rental worksheet first to see whether the rent would cover a long-term loan

B. Nothing more, because any house that will not sell can always be rented at a profit

C. Raise the after-repair value until the flip shows a larger margin for any error

D. Plan to lower the vacancy rate in the worksheet if she ever needs the rental exit

8. (1 pt) **Lesson 1.4**

In this example, a family wants $3,000 a month of net income from paid-off rental houses. Each house rents for $1,500, and by the 50% rule about half the rent is left after expenses. Each costs $175,000 plus 3% closing costs. How many houses are needed, and how much capital?

A. 2 houses and $360,500

B. 4 houses and $721,000

C. 4 houses and $700,000

D. 12 houses and $2,163,000

9. (1 pt) **Lesson 1.4**

Path A owns 14 mortgaged doors netting about $215 each; Path B owns 4 paid-off houses netting about $750 each. Both earn about $3,000 a month. What risk does Path A carry that Path B largely avoids?

A. A few vacancies or one big repair can wipe out its income while every loan stays due

B. None at all, because spreading the same income across more doors always lowers the risk

C. Path B is riskier, because a single vacancy there removes a full quarter of its income

D. Path A may lose all its depreciation deductions in any year that rents in its town fall

10. (1 pt) **Lesson 1.5**

A “turnkey” company offers to sell you a renovated rental, manage it afterward and connect you with its partner lender. Which step best protects you?

A. Accept the package, since one company in every role avoids any conflict of interest

B. Use your own agent’s comps, your own inspector and outside lenders’ Loan Estimates

C. Rely on the company’s pro forma, since it knows this property better than anyone

D. Skip the inspection, since the seller has just renovated the house from top to bottom

11. 1 pt **Lesson 2.1**

In this example, the seller's tax bill is $1,980 on an assessed value of $165,000, and the county reassesses at the sale price. You will pay $255,000, and the tax rate stays the same. What tax should you enter in the Rental worksheet, and how much would using the seller's bill overstate your monthly cash flow?

A. $3,060; about $90 a month

B. $1,980; it would not overstate it

C. $3,060; about $1,080 a month

D. $2,550; about $48 a month

12. 1 pt **Lesson 2.1**

A podcast calls a town "the hottest market in the state." You find that its population grew, but one plant employs about 40% of the workers and building permits have doubled in two years. What is the best conclusion?

A. One dominant employer and a surge in new supply are risks to measure before buying

B. The population growth proves the market is safe for almost any kind of rental

C. The rising permit count proves that demand is strong, so rents should keep rising

D. A market called "hot" should be bought quickly, before prices rise any further

13. 1 pt **Lesson 2.2**

A fully renovated house stands on a block of older, poorly kept homes with many "for rent" signs. How should an investor set up the analysis?

A. Use Class A assumptions for every input, because the house itself is fully renovated

B. Rate the area's class by the kind of people who appear to live along the block

C. Class A or B house, Class C area: rent and resale held back, repairs perhaps lower

D. Ignore class altogether, because the 1% rule already accounts for the location

14. (1 pt) **Lesson 2.2**

A landlord's draft ad reads, "Cozy 2-bedroom, perfect for a quiet retired couple." Which rewrite follows the Fair Housing Act's advertising rule?

A. "2-bedroom home on a quiet street, ideal for mature adults; sorry, no children"

B. "2-bedroom home on a quiet street, perfect for a quiet professional couple"

C. "2-bedroom home on a quiet street, best suited to a small household without kids"

D. "2-bedroom home on a quiet street, single level, near a bus line; no smoking"

15. (1 pt) **Lesson 2.3**

In this example, the subject is a 3-bedroom, 2-bath house with a one-car garage, and its tenant will pay all utilities. A comp leased for $1,950; it has 1 bath and no garage, and its rent includes water, sewer and garbage worth about $110 a month. Using $75 for a bath and $75 for a garage, what is the comp's adjusted rent?

A. $1,910

B. $2,210

C. $1,690

D. $1,990

16. (1 pt) **Lesson 2.3**

In this example, HUD's 3-bedroom Fair Market Rent for the area is $1,880, and tenant-paid utilities average $210 a month. Your adjusted comps for a well-kept house, where the tenant pays utilities, cluster at $1,725. What is the best interpretation?

A. FMR is the legal maximum rent here, so the rent may not go above $1,880 a month

B. Its shelter equivalent is about $1,670, so $1,725 is plausible; the comps decide

C. Enter $1,880, since FMR is the official market rent for this area and bedroom count

D. The comps must be wrong, because they fall below HUD's $1,880 figure for the area

17. 1 pt **Lesson 2.4**

In this example, a renovated comp sold for $320,000. Its adjustments are +$4,800 for time, −$14,000 for size and +$7,500 for a half bath it lacks. What are its adjusted price and its gross adjustment as a percent of the sale price?

A. $346,300; gross about 8.2%

B. $318,300; gross about 0.5%

C. $318,300; gross about 8.2%

D. $293,700; gross about 8.2%

18. 1 pt **Lesson 2.4**

A seller's flyer for a house with its original 1970s kitchen and baths says, "Renovated homes on this street sold for $410,000!" How should an investor use those sales?

A. As the house's value today, since the sales are recent and on the same street

B. Averaged with the seller's asking price to arrive at a fair value for it today

C. As evidence of possible ARV; today's value comes from similar unrenovated sales

D. Not at all, since renovated sales never matter when valuing a dated house

19. 1 pt **Lesson 2.5**

As of 2026, a Washington tenant vacates on September 10. Under RCW 59.18.280, by what date must the landlord give the full and specific statement of the deposit and any refund?

A. October 11

B. October 1

C. September 24

D. October 10

20. 1 pt **Lesson 2.5**

As of 2026, an Oregon tenant has rented a house for three years. The house's first certificate of occupancy was issued nine years before the notice, and the landlord wants a 12% increase. Which statement is correct?

A. The increase is limited to 9.5% for 2026, because every Oregon rental is capped

B. No notice is required, because newer buildings are exempt from the whole statute

C. The increase is unlawful, because Oregon forbids any increase after the first year

D. The cap does not apply to a unit under 15 years old, but 90 days' notice still does

21. 1 pt **Lesson 3.1**

In this example, a triplex has three units at $1,200 a month. Last year one unit sat empty for a month and a half, a departing tenant left owing $600 that was never collected, and a new tenant received $150 off for two months. What was the economic vacancy?

A. 4.17%

B. 5.56%

C. 6.25%

D. 1.39%

22. 1 pt **Lesson 3.1**

A seller's income statement for a duplex lists, besides rent, $1,500 a year of late fees and $2,200 of security deposits collected from new tenants. What belongs in the Rental worksheet's Other income?

A. Neither; late fees are not dependable, and deposits belong to the tenants

B. Both, since the seller actually received all of that money during the year

C. The deposits only, since late fees are too uncertain to count on as income

D. The late fees only, since some tenants paid them in every year on record

23. 1 pt Lesson 3.2

In this example, a duplex rents for $2,400 a month in total with 5% vacancy. Taxes are $2,900, insurance $1,400, owner-paid water and garbage $100 a month, repairs 6%, CapEx 8% and management 9%. Using the Deal Analyzer's conventions, what are the annual operating expenses?

A. $11,994.40

B. $12,124.00

C. $11,792.80

D. $10,894.40

24. 1 pt Lesson 3.2

A beginner's analysis of a 1950s single-family rental shows operating expenses equal to 21% of gross income. What does that most likely mean?

A. The house is unusually efficient to run, which makes it an especially strong buy

B. The mortgage payment should be added in to bring the ratio to a normal level

C. A line is probably missing, such as CapEx, management or the reassessed taxes

D. The vacancy allowance should be lowered to bring the ratio into better balance

25. 1 pt Lesson 3.3

In this example, a $220,000 rental has NOI of $15,400 and annual debt service of $12,600. The investor put in $62,000 of down payment, closing costs and upfront repairs. What are the DSCR and the cash-on-cash return?

A. About 1.22 and 4.5%

B. About 0.82 and 4.5%

C. About 1.22 and 7.0%

D. About 1.22 and 24.8%

26. (1 pt) **Lesson 3.3**

An investor reruns a rental in the Rental worksheet, changing only the down payment from 25% to 40%. Which results will NOT change?

A. Cash flow and cash-on-cash return

B. DSCR and break-even occupancy

C. Debt service and annual cash flow

D. Net operating income and cap rate

27. (1 pt) **Lesson 3.4**

In this example, a duplex rents for $2,600 a month in total, and its principal and interest are $1,150. One analyst's 50% rule estimate is $72 a month. What is the correct estimate, and what went wrong in the analyst's version?

A. $72; vacancy must always be taken off before applying the 50% rule

B. $150; the analyst took 6% vacancy off first, counting vacancy twice

C. $1,300; the mortgage payment is already inside the 50%

D. $150; the analyst forgot to subtract the mortgage payment from the estimate

28. (1 pt) **Lesson 3.4**

A $62,000 house listed at $1,250 a month easily meets the old 2% rule. According to Lesson 3.4, what does that most often signal today?

A. A rare bargain that should be bought quickly, before other investors notice it

B. Proof that the 50% rule will overstate this particular house's real expenses

C. A warning to check condition, location, vacancy and turnover before trusting it

D. That no full worksheet is needed, because the screen passed by such a wide margin

29. (1 pt) **Lesson 3.5**

In this example, a house rents for $2,000 a month with the Deal Analyzer's defaults: 6% vacancy, 6% repairs, 7% CapEx and 9% management. If rent comes in 10% lower, by about how much does monthly cash flow fall?

A. Exactly $200

B. About $145

C. About $188

D. About $162

30. 1 pt **Lesson 3.5**

Your analysis shows a house works only at $216,000, $34,000 below the asking price. Which explanation to send with the offer is consistent with the course?

A. A claim that the foundation looks weak, though the inspection found no such problem

B. A note that other buyers have walked away, though you know of no such buyers

C. A noon-tomorrow deadline, so the seller has no time to compare other offers

D. The rent comps, the reassessed tax estimate and the roof's age, with your numbers

31. 1 pt **Lesson 4.1**

In this example, a borrower earns $7,200 a month. She pays $1,750 PITIA on her home and $300 on a car. She is buying a rental whose appraiser's market rent is $2,100 and whose PITIA will be $1,700. Using the 75% convention, what is her DTI?

A. About 28.5%

B. About 30.2%

C. About 52.1%

D. About 27.0%

32. 1 pt **Lesson 4.1**

As of 2026, a first-time investor with no history of managing rentals buys a house whose appraiser's market rent is $2,200 and whose PITIA will be $1,500. Under the Fannie Mae guide described in Lesson 4.1, how is the net rental income treated?

A. It is +$150, and it is simply added to her monthly income

B. It is +$700, and the whole of it is added to her monthly income

C. It is +$150, and the lender counts it as an added monthly debt

D. It is +$150, and it may only offset the property's own payment

33. (1 pt) **Lesson 4.2**

A house hacker compares a 5%-down conventional loan with PMI and a 3.5%-down FHA loan. Which statement about mortgage insurance matches Lesson 4.2?

A. PMI follows the Homeowners Protection Act; FHA's premium often lasts much longer

B. Both kinds end automatically when the balance reaches 78% of the original value

C. Mortgage insurance can be left at zero in the worksheet, since tenants pay it

D. FHA loans carry no mortgage insurance, since the government insures them for free

34. (1 pt) **Lesson 4.2**

As of 2026, a borrower has lived for two years in a duplex she bought with an FHA loan. She takes a job 160 miles away and wants an FHA loan on a house near work. Under HUD's rules described in Lesson 4.2, which is true?

A. She must sell the duplex first, because an FHA loan cannot stay on a rented home

B. A job move over 100 miles is an FHA exception; she may keep the duplex as a rental

C. She may take out a new FHA loan every year, on any home she decides to buy

D. She must refinance the duplex into a VA loan before she may buy another home

35. (1 pt) **Lesson 4.3**

In this example, a DSCR lender computes rent ÷ PITIA. A rental rents for $2,300; P&I is $1,450 a month, taxes $2,640 a year and insurance $960 a year. The investor's own NOI is $15,000 and annual debt service $17,400. What ratio does the lender see, and what is the property's true coverage?

A. About 1.31 and 1.16

B. About 1.31 and 0.86

C. About 1.59 and 0.86

D. About 0.76 and 0.86

36. (1 pt) **Lesson 4.3**

An investor expects to sell a rental in about 18 months and is offered a loan with a 5-4-3-2-1 prepayment penalty. Why does that matter to her plan?

A. Paying it off in year 2 would cost 4% of the balance, which belongs in her sale math

B. It does not matter, because penalties apply only to commercial apartment loans

C. It lowers her interest rate, so a prepayment penalty always ends up saving money

D. It applies only if she refinances the loan, never if she sells the property itself

37. (1 pt) **Lesson 4.4**

In this example, a grandparent lends $30,000 at 7% interest-only toward the down payment on a rental, on a signed note secured by a recorded deed of trust. The rental's cash flow before this loan is $1,950 a year. What is the cash flow after the grandparent's interest?

A. −$150 a year

B. +$1,950 a year

C. +$1,775 a year

D. +$4,050 a year

38. (1 pt) **Lesson 4.4**

In an installment land contract, who holds legal title while the buyer makes payments, and what is the buyer's chief risk?

A. The buyer takes title, and the seller holds a recorded lien he can foreclose on

B. The seller's lender holds title, and the buyer risks a demand under due-on-sale

C. A trustee holds title, and the buyer's main risk is a step-down prepayment penalty

D. The seller keeps title, and a buyer who falls behind can lose everything paid

39. 1 pt **Lesson 4.5**

In this example, a rental is worth $360,000 and owes $170,000 at 4%. A lender offers a 75% cash-out refinance at 7% with $6,000 of costs. Roughly what does the cash received cost in the first year, as a percent of that cash?

A. About 12.9%

B. 7.0%, the new loan's rate

C. 3.0%, the rise in the rate

D. About 4.5%

40. 1 pt **Lesson 4.5**

An owner nine years into a 30-year rental loan refinances into a new 30-year loan, and her payment falls $110 a month. What hidden cost should she weigh?

A. None, because a lower monthly payment always means a cheaper loan in the end

B. The clock restarts: 39 years of payments in all, and possibly more total interest

C. Her new fixed interest rate will rise each year that the new loan is outstanding

D. Her loan balance will grow, because refinancing adds the old interest to it

41. 1 pt **Lesson 5.1**

In this example, the House hack worksheet shows a duplex owner's monthly cost to live there of $1,520, and a unit like hers rents for $1,400. About $270 a month of her payment is first-year principal. How does the house hack compare with renting?

A. $120 a month more than renting in cash, but about $150 ahead counting principal

B. $120 a month less than renting in cash, and about $390 ahead counting principal

C. $150 a month of spendable cash flow, because principal paydown counts as cash

D. $1,520 a month more than living free, which makes it a poor choice for her

42. 1 pt **Lesson 5.1**

A duplex house hack would save a young buyer about $60 a month compared with renting, but its move-out view loses about $340 a month with a DSCR of 0.82. What is the soundest conclusion?

A. Buy it, because principal paydown will turn the move-out loss into a profit over time

B. Buy it, because the move-out view does not matter at all for as long as she lives there

C. A home but not yet a rental: negotiate, recheck rents, plan to stay longer or walk away

D. Buy it and move out after a year, renting both units at today's market rents

43. 1 pt **Lesson 5.2**

An owner wants to rent a basement bedroom. Under the model codes many cities adopt, as Lesson 5.2 describes them, which room may be counted as a legal sleeping room? (Always check the local code.)

A. 80 sq ft; 3 sq ft window near the ceiling; sill 60 in. high; smoke alarm

B. 65 sq ft; 5.7 sq ft escape opening; sill 40 in. high; smoke alarm

C. 80 sq ft; 5.7 sq ft escape opening; sill 40 in. high; smoke alarm

D. 80 sq ft; 5.7 sq ft escape opening; sill 50 in. high; smoke alarm

44. 1 pt **Lesson 5.2**

A single buyer's live-in flip is finished. She has owned and lived in the house as her main home for 23 months and has no job, health or other qualifying reason to move. What does Lesson 5.2 say about selling now?

A. She qualifies, because 23 months rounds up to the required two full years

B. She qualifies, because the tests require only one year of ownership and use

C. She qualifies, because the exclusion depends on the size of her profit, not time

D. She misses the 24-month tests, so the full exclusion is generally unavailable

45. 1 pt Lesson 5.3

As of 2026, an FHA buyer's fourplex would have PITI of $4,200 a month, and the appraiser's vacancy and maintenance estimate is below 25%. What total fair market rent for all four units, including the buyer's own, is needed to pass the self-sufficiency test?

A. At least $4,200 — about $1,050 a unit

B. At least $5,250 — about $1,313 a unit

C. At least $4,200 from the three rented units alone

D. At least $5,600 — about $1,400 a unit

46. 1 pt Lesson 5.3

A fourplex seller's pro forma counts $300 a month of RUBS water bill-back. The leases say nothing about it, and the city forbids charging tenants for water by formula. How should the buyer treat it?

A. Count all of it, since other owners in the area commonly collect such charges

B. Leave it out of Other income and enter the full water bill as owner-paid

C. Count half of it, as a fair compromise between the seller's view and the city's

D. Count all of it, but raise the vacancy rate to offset the legal risk

47. 1 pt Lesson 5.4

In this example, a 14-unit building's NOI is $72,000, and an investor pays its value at a 6% cap rate. Five years later NOI is unchanged, but market cap rates are 7.5%. How much value has been lost?

A. None, because NOI did not change

B. $108,000, a 9% drop

C. $240,000, a 20% drop

D. $960,000, an 80% drop

48. 1 pt **Lesson 5.4**

A seller's pro forma for a 1960s apartment building with owner-paid water and heat shows a 28% expense ratio, and the asking price is based on that NOI. What should the buyer do?

A. Accept the pro forma, since the lender will verify all of the numbers later anyway

B. Use the pro forma but apply a lower cap rate to the NOI to be conservative

C. Use the pro forma, since five-plus-unit buildings are valued by their NOI

D. Get the trailing twelve months' actual income, expenses and bills, then rebuild

49. 1 pt **Lesson 5.5**

As of 2026, an FHA borrower is buying a one-unit home with an ADU. The appraiser's fair market rent for the ADU is $1,350, the signed lease is for $1,300, and her other qualifying income is $4,200 a month. How much ADU rent may the lender count?

A. $975, within the 30% cap

B. $1,012.50, within the 30% cap

C. $1,300, the full lease rent

D. $1,552.50, the 30% cap itself

50. 1 pt **Lesson 5.5**

Homes nearby with ADUs sell for about $85,000 more than similar homes without them. A family spent $165,000 building a backyard ADU and plans to refinance on the new value. What should they expect?

A. Added appraised value equal to the full $165,000 that they spent to build it

B. No added value at all, because appraisers ignore accessory dwelling units

C. Added value equal to roughly ten years of the ADU's expected rent income

D. About $85,000 of added value; the rest must come back through rent over time

ANSWER KEY

1. B. Appreciation is $\$240{,}000 \times 0.03 = \$7{,}200$, so the total is $\$1{,}100 + \$1{,}900 + \$7{,}200 + \$1{,}300 = \$11{,}500$, and $\$11{,}500 \div \$66{,}000 \approx 17.4\%$. Without appreciation it is $\$4{,}300 \div \$66{,}000 \approx 6.5\%$ — the figure a careful investor can count on, and only $1,100 of it is spendable cash. Choice A drops principal paydown and the tax benefit from the second figure, though neither depends on appreciation; choice D divides by the price instead of the cash invested.
2. C. Depreciation recovers the building's cost — never the land's — over 27.5 years, and it can shelter some cash flow from income tax. But it is generally recaptured and taxed at sale, so it defers and reduces tax rather than erasing it. Choice A is the tempting half-truth: land is never depreciated, and the deduction comes back into the computation when the property is sold. It is not cash (B), which is why the Deal Analyzer leaves it out of cash flow.
3. B. One empty month costs $\$1{,}650 + \$150 + \$1{,}100 = \$2{,}900$, and $\$2{,}900 \div \$380 \approx 7.6$ months of surplus are needed to earn it back. The payment is due whether or not the unit is rented, which is why Lesson 1.2 calls reserves the borrower's shock absorber: thin margins turn ordinary events into emergencies. Choice A counts only the payment, choice C forgets the utilities, and choice D forgets the payment.
4. C. Loan constant $= 12 \times \$1{,}197.54 \div \$180{,}000 = \$14{,}370.48 \div \$180{,}000 \approx 7.98\%$. Each borrowed dollar costs 7.98% a year but earns only 6.8% in the property, so borrowing lowers the return on the owner's cash — negative leverage. Choice A assumes leverage always helps; choice B forgets to multiply the monthly payment by 12. The constant is above the 7% rate because it includes principal.
5. C. Lesson 1.2 presents both fairly: buying with cash grows more slowly, but no lender can ever take the property and a bad year means less income rather than ruin; careful, limited debt with reserves can let a family own property sooner. The course teaches the arithmetic of each and leaves the choice to the family. Choice A contradicts the lesson's own numbers — leverage raises returns only when the cap rate exceeds the loan constant — and appreciation is never a plan (D).
6. B. No directly owned rental is truly passive. Hiring a manager reduces the work but not the responsibility: the owner chooses and supervises the manager, reads the owner statements, approves large repairs and pays for the new roof. Choice A is the sales pitch the course warns against — anyone selling "passive income" from rentals is selling something.

7. A. Every strategy needs a backup exit, and the backup must work on paper too. Lesson 1.3 says a careful flipper runs the Rental worksheet before buying, because many houses bought at flip prices cannot cover a rental loan. Choice B assumes the backup works without testing it, and C and D massage inputs instead of measuring the deal.
8. B. Each paid-off house nets about $\$1{,}500 \times 0.50 = \$750$ a month, so $\$3{,}000 \div \$750 = 4$ houses. Each costs $\$175{,}000 \times 1.03 = \$180{,}250$, so $4 \times \$180{,}250 = \$721{,}000$. Choice A counts the whole rent as income, forgetting that taxes, insurance, repairs, CapEx and vacancy never stop on a paid-off house; choice C leaves out closing costs.
9. A. Thin cash flow per door is fragile: in Lesson 1.4's example one $8,000 roof equals 32 door-months of $250 cash flow, and every one of Path A's loans must still be paid in a bad month. A paid-off house in a bad month means less income, not a missed payment. Choice B is the tempting answer, but more doors also means more roofs, tenants and mortgages, and Path B's vacancy still leaves its income positive (C).
10. B. The seller profits from the price, the manager from the fees and the partner lender from the loan, so none of them is independent — a conflict of interest. Use your own team's numbers and check every input yourself. Choice A reverses the lesson: bundling the roles creates the conflict rather than removing it, and a fresh renovation is no reason to skip the inspection (D).
11. A. The rate is $\$1{,}980 \div \$165{,}000 = 1.2\%$, so the new bill is about $\$255{,}000 \times 0.012 = \$3{,}060$. The difference is $\$3{,}060 - \$1{,}980 = \$1{,}080$ a year, or $90 a month of cash flow that the seller's bill would hide. Choice B is the classic mistake of using the seller's old bill; choice C forgets to divide the yearly difference by 12. Reassessment rules differ by state, so check with your county assessor.
12. A. Population growth matters most when it comes with diverse jobs. One employer providing much of the town's paychecks is concentration risk, and a permit surge can outrun new households. Choosing a market because it is called "hot" is the first classic mistake in Lesson 2.1. Choice C confuses new supply with new demand.
13. C. Property class and neighborhood class are separate. A renovated house may need fewer repairs than its neighbors, but its rent and resale are limited by the street, so the inputs should reflect both. Choice A is the classic mistake of using Class A assumptions because the listing photos look good, and B is never allowed: class describes buildings and economics, never people.

14. D. A lawful ad describes the property and its terms, never the people the owner hopes to attract. Phrases such as “perfect for,” “ideal for” or “without kids” state a preference about familial status, and “no children” is plainly unlawful. Choice B sounds milder but still describes preferred tenants rather than the home.

15. D. Adjust the comp toward the subject. It lacks a bath and a garage the subject has, so add $75 for each; it includes utilities the subject’s tenant would pay, so subtract $110: $\$1{,}950 + \$75 + \$75 - \$110 = \$1{,}990$. Choice A reverses every sign, and choice B forgets that included utilities make the comp’s rent look higher than a tenant-pays rent.

16. B. FMR is a gross rent (shelter plus utilities) set at the 40th percentile, so subtract the tenant’s utilities: $\$1{,}880 - \$210 = \$1{,}670$. A well-kept house may rent somewhat above that, and leased comps are the evidence. Choice C treats FMR as market rent and would overstate income; FMR is not a legal limit either (A).

17. C. Net: $\$320{,}000 + \$4{,}800 - \$14{,}000 + \$7{,}500 = \$318{,}300$. The gross adjustment adds the sizes regardless of sign: $\$4{,}800 + \$14{,}000 + \$7{,}500 = \$26{,}300$, and $\$26{,}300 \div \$320{,}000 \approx 8.2\%$. The gross figure measures how comparable the sale really is; Lesson 2.4 calls 3–6% strong and 20% or more probably not comparable. Choice B uses the small net change, $\$1{,}700 \div \$320{,}000$, which hides how different the house is; choices A and D ignore the signs of the adjustments.

18. C. Comps must be in the same condition class as the subject. Renovated sales show what the house might be worth after repairs — its ARV — while its as-is value comes from unrenovated sales, and the gap must cover rehab, holding, selling costs and profit. Choice A is the seller’s favorite trick of valuing a dated house with renovated comps; renovated sales still matter for the BRRRR or flip worksheet (D).

19. D. Washington requires the statement and any refund within 30 days after the tenant vacates; September has 30 days, so September 10 plus 30 days is October 10. Choice A uses Oregon’s 31 days and choice B Idaho’s 21-day default — a reminder that neighboring states differ and you must read your own statute.

20. D. ORS 90.323–.324 exempts units whose first certificate of occupancy is less than 15 years old from the percentage limit, but the 90-day written notice, its required contents and the limit of one increase in 12 months still apply. Choice B is the classic mistake of treating an exemption as total; choice A ignores the new-construction exemption.

21. C. GSI is $3 \times \$1{,}200 \times 12 = \$43{,}200$. Lost income: empty $1.5 \times \$1{,}200 = \$1{,}800$, credit loss $600 and concessions $2 \times \$150 = \$300$, so $\$2{,}700 \div \$43{,}200 = 6.25\%$. Choice A is the physical vacancy, $1.5 \div 36 \approx 4.17\%$, which counts only empty

unit-months; choice B forgets the concession. Budget for the larger, economic number.

22. A. Other income must be steady and documented, like laundry, parking or storage. Late fees are a penalty you hope never to collect, and a security deposit is money held for the tenant and owed back. Choice D is tempting because the fees were paid, but a worksheet that depends on tenants paying late is wrong.

23. A. GSI $\$2{,}400 \times 12 = \$28{,}800$; EGI $\$28{,}800 \times 0.95 = \$27{,}360$. Repairs and CapEx on scheduled rent: $\$28{,}800 \times 0.14 = \$4{,}032$; management on collected rent: $\$27{,}360 \times 0.09 = \$2{,}462.40$; utilities $\$100 \times 12 = \$1{,}200$. Total: $\$2{,}900 + \$1{,}400 + \$1{,}200 + \$4{,}032 + \$2{,}462.40 = \$11{,}994.40$. Choice B figures management on scheduled rent and choice C figures repairs and CapEx on collected rent — conventions some other tools use, but not this one.

24. C. Small rentals commonly run about 35–50% of gross income once every cost is honestly counted, and older houses often run higher. An expense ratio near 20% almost always means a missing line. Choice B is a classic error: the mortgage is debt service and never belongs in operating expenses.

25. A. DSCR $= \$15{,}400 \div \$12{,}600 \approx 1.22$. Cash flow $= \$15{,}400 - \$12{,}600 = \$2{,}800$, and cash-on-cash $= \$2{,}800 \div \$62{,}000 \approx 4.5\%$. Choice B divides debt service by NOI; choice C gives the cap rate, $\$15{,}400 \div \$220{,}000 = 7.0\%$, which ignores the loan; choice D divides NOI rather than cash flow by the cash invested.

26. D. NOI is income minus operating expenses before any loan, and the cap rate is NOI ÷ price, so neither depends on financing. Cash flow, cash-on-cash, DSCR, debt service and break-even occupancy all change with the loan. Choice B is the tempting one, but DSCR and break-even occupancy both include debt service.

27. B. The rule's 50% already covers vacancy and every operating expense, so apply it to gross rent and subtract P&I separately: $0.50 \times \$2{,}600 - \$1{,}150 = \$150$. The analyst used $0.50 \times \$2{,}600 \times 0.94 - \$1{,}150 = \$72$, double-counting vacancy. Choice C misreads the rule — the mortgage is not inside the 50% — and either way the estimate is only a screen before the full worksheet.

28. C. Today a listing that meets the 2% rule is usually a warning sign about condition or location. Cheap houses often carry high vacancy, repairs and turnover that a rent-to-price screen cannot see, so a pass is only an invitation to run the full worksheet. Choice D treats a screen as a verdict, the lesson's first classic mistake.

29. B. The rent drop is $200 a month, $2,400 a year, but some costs shrink with it. Each lost rent dollar removes 0.94 of EGI but also saves 0.13 of repairs and CapEx

and $0.09 \times 0.94 = 0.0846$ of management, so NOI falls $\$2{,}400 \times (0.94 - 0.13 - 0.0846) \approx \$1{,}740.96$ a year, about $145 a month. Choice A ignores the expenses that move with rent; choice D forgets that management, figured on collected rent, falls too.

30. D. A lower offer is explained honestly with real evidence — comps, the reassessed taxes, needed repairs or CapEx — never by inventing defects, misstating facts or applying pressure. Choices A and B misstate facts, and C creates false urgency; all three break the course's rule of honest dealing.

31. B. Net rental income $= 0.75 \times \$2{,}100 - \$1{,}700 = -\$125$, which counts as a monthly debt. Debts $= \$1{,}750 + \$300 + \$125 = \$2{,}175$; DTI $= \$2{,}175 \div \$7{,}200 \approx 30.2\%$. Choice A ignores the rental's shortfall; choice C counts the whole new PITIA as debt with no credit for rent; choice D adds 100% of the rent minus PITIA (+$400) to income.

32. D. Net rental income is $0.75 \times \$2{,}200 - \$1{,}500 = \$150$. With less than twelve months of experience managing rentals, positive rental income can only offset the property's own payment, not add to her income — lenders want proof she can be a landlord before they lean on her rents. Choice A would be right for an experienced landlord, and choice B counts 100% of the rent.

33. A. On a conventional loan the borrower may ask to cancel PMI at 80% of the original value, and it ends automatically at 78% on schedule. FHA's annual premium is not governed by that law and, with a small down payment, commonly lasts much longer — often the life of the loan — which is why many owners later refinance out of FHA. Choice B wrongly applies the HPA to FHA; never leave mortgage insurance at zero on a low-down-payment loan (C).

34. B. FHA generally insures one principal-residence loan per borrower at a time, with narrow exceptions such as an employment move of more than 100 miles. After the occupancy period she may move out, keep the loan and rent her old unit. Choice C describes the plan the lesson warns against — signing a new occupancy certificate every year as a strategy.

35. B. PITIA $= \$1{,}450 + \$2{,}640 \div 12 + \$960 \div 12 = \$1{,}450 + \$220 + \$80 = \$1{,}750$, so the lender sees $\$2{,}300 \div \$1{,}750 \approx 1.31$. True coverage is NOI ÷ debt service: $\$15{,}000 \div \$17{,}400 \approx 0.86$. The loan can be approved on a property that loses money, because the lender's ratio ignores vacancy, repairs, CapEx and management. Choice A inverts the second ratio; choice C leaves taxes and insurance out of PITIA.

36. A. A step-down penalty charges a percentage of the balance for paying off early — 5% in year 1, 4% in year 2 and so on — whether the owner sells or refinances.

On a $250,000 balance, year 2 would cost $0.04 \times \$250{,}000 = \$10{,}000$. Read every term sheet for penalties; choice D is the tempting misreading, and choice B is false — Lesson 4.3 notes that DSCR loans on rental properties commonly carry step-down penalties.

37. A. Interest is $\$30{,}000 \times 0.07 = \$2{,}100$ a year ($175 a month), so $\$1{,}950 - \$2{,}100 = -\$150$. The Rental worksheet does not see a private loan used toward the down payment, so its payments must be subtracted by hand. Choice B treats family money as free, and choice C subtracts only one month's interest. Kindness from family is not a reason to borrow for a deal that works only with your own cash.

38. D. In a land contract — also called a contract for deed — the seller keeps legal title until the last payment, and buyers who fall behind can lose all they have paid; many states now regulate these contracts closely, and both sides should use an attorney. Choice A describes the other common form, a deed-and-mortgage sale, in which the buyer receives the deed at closing.

39. A. New loan $\$360{,}000 \times 0.75 = \$270{,}000$; cash received $\$270{,}000 - \$170{,}000 - \$6{,}000 = \$94{,}000$. First-year interest rises from about $\$170{,}000 \times 0.04 = \$6{,}800$ to $\$270{,}000 \times 0.07 = \$18{,}900$, an extra $12,100, so the cash costs about $\$12{,}100 \div \$94{,}000 \approx 12.9\%$ a year. Choice B is the tempting answer, but the new 7% rate applies to the whole balance, including the $170,000 that used to cost 4%.

40. B. Refinancing an aging loan into a new 30-year term lowers the payment partly by stretching it out, so some of the "savings" are just payments pushed later. She could choose a shorter term or keep paying the old amount on the new loan. Choice A is the mistake Lesson 4.5 names: ignoring the term reset.

41. A. In cash she pays $\$1{,}520 - \$1{,}400 = \$120$ a month more than renting. But $\$270 - \$120 = \$150$ a month is the net gain once the principal she keeps as equity is counted. That equity cannot pay bills, and selling costs can eat years of it, so it is not cash flow (C). The honest comparison is with renting a similar unit, not with living free (D); choice B reverses the sign.

42. C. A property that loses money as a full rental can trap the owner — forced to keep living there, feed it cash or sell. The honest choices are a lower price, better-supported rents, a longer stay or walking away. Choice A treats principal paydown as cash flow; it builds equity but cannot pay a $340 monthly shortfall.

43. C. As commonly adopted, a bedroom needs at least 70 square feet, an emergency escape opening of at least 5.7 square feet (5.0 at grade) with a sill no higher than 44 inches, and smoke alarms. Choice A fails the escape rule — a small window

near the ceiling is not an exit — choice B is under 70 square feet, and choice D's sill is too high. An illegal bedroom is a hazard and a liability, not an asset.

44. D. Section 121 requires at least two years each of ownership and use during the five years before the sale. At 23 months she falls short, and a reduced exclusion applies only to certain moves for employment, health or unforeseen circumstances. Choice A is the tempting rounding error; selling a live-in flip at 23 months is one of the lesson's classic mistakes. (Education, not tax advice.)

45. D. Net self-sufficiency rental income is fair market rent minus the greater of the appraiser's estimate or 25%, and PITI may not exceed it: $0.75 \times \text{FMR} \geq \$4{,}200$, so $\text{FMR} \geq \$4{,}200 \div 0.75 = \$5{,}600$, or $\$5{,}600 \div 4 = \$1{,}400$ a unit. Choice A forgets the 25% deduction; choice B multiplies by 1.25 instead of dividing by 0.75; and HUD counts all units, including the buyer's (C).

46. B. A bill-back counts only if state and city law allow it and it is written into every lease. Here neither is true, so the owner pays the water and the income does not exist. Choice C still counts income the law forbids; counting a bill-back the state or city forbids is one of Lesson 5.3's classic mistakes.

47. C. Value = NOI ÷ cap rate: $\$72{,}000 \div 0.06 = \$1{,}200{,}000$ at purchase and $\$72{,}000 \div 0.075 = \$960{,}000$ later, a loss of $240,000, or 20%. Choice A is the tempting belief that value cannot fall while income holds; rising market cap rates lower value without a single tenant leaving, which is why careful buyers underwrite the exit at a higher cap rate. Choice D mistakes the new value for the loss.

48. D. Older apartment buildings commonly run 40–55% expense ratios, especially with owner-paid utilities, so a 28% pro forma is a warning, not a gift. Value a building on documented trailing-twelve-month NOI, not projections. Choice C is half right — five-plus-unit buildings are valued by NOI — but that is exactly why an overstated NOI overstates the price, and a lower cap rate (B) would raise the value further.

49. A. HUD lets the lender count 75% of the lesser of the appraiser's fair market rent or the lease: $0.75 \times \min(\$1{,}350, \$1{,}300) = \$975$. The cap is 30% of total qualifying income: $0.30 \times (\$4{,}200 + \$975) = \$1{,}552.50$, and $975 is below it. Choice B uses the higher appraised rent, $0.75 \times \$1{,}350$; choice C forgets the 75% factor.

50. D. By the principle of contribution, a feature is worth what it adds in the market, not what it cost, and appraisers lean on comparable sales. Here that is about $85,000, so the other $80,000 must come back through rent. Choice A is the classic mistake of assuming an ADU adds appraised value equal to its cost.

COURSE EXAM

Final Exam

Covers Units 1–10. Time: 120 minutes.

Closed book and closed notes; a basic calculator only. This exam has sixty four-choice questions mixed across all ten units, one point each. Take it in one sitting with a 120-minute limit — about two minutes a question — with a parent or proctor keeping time. Show the arithmetic for every calculation question on scratch paper: the formula, the numbers substituted and the answer. Use the Deal Analyzer's conventions throughout: repairs and CapEx are percents of scheduled rent, management is a percent of collected rent, and operating expenses never include the mortgage. Choose the one best answer and answer every question; there is no penalty for guessing. Figures marked "in this example" are examples, not current rents, rates, taxes or loan limits; rules marked "as of 2026" are stated as the lessons teach them; and tax questions are education, not tax advice. To score the exam, divide the number correct by 60 and multiply by 100 for your percent; aim for 80% or better. The capstone presentation (Lesson 10.5) is not part of this written exam: it is graded separately by a panel of at least two adults using the Unit 10 rubric. Afterward, review every miss in your investor's notebook: write down the idea the question tested, rework the arithmetic, explain why the right answer is right and why your choice was wrong, and reread that lesson's "Run the numbers" paragraph.

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1. (1 pt) **Lesson 1.2**

   In this example, a rental is worth $330,000 and its loan balance is $280,500. What is its loan-to-value ratio now, and what is it after a 10% fall in value?

   A. 85% now; about 75% after the fall

   B. 15% now; about 5.6% after the fall

   C. 85% now; about 76.5% after the fall

   D. 85% now; about 94.4% after the fall

2. 1 pt **Lesson 2.1**

In this example, Market R's median house costs $210,000, rents for $1,650 a month and carries taxes of 1.9% of value plus $1,600 of insurance. Market S's costs $280,000, rents for $2,050 and carries taxes of 0.8% of value plus $1,300 of insurance. Which leaves more rent per dollar of price after taxes and insurance?

A. R, about 9.4% against about 8.8%

B. S, about 7.5% against about 6.8%

C. R, because its price-to-rent ratio is lower

D. They are about equal, since both lose a similar share to taxes and insurance

3. 1 pt **Lesson 3.3**

In this example, a rental's gross scheduled income is $31,200, its operating expenses are $12,480 and its annual debt service is $15,960. What is its break-even occupancy?

A. About 91.2%

B. About 51.2%

C. About 40.0%

D. About 8.8%

4. 1 pt **Lesson 4.1**

In this example, a borrower earns $9,000 a month and already pays $2,700 a month on other debts; her lender caps DTI at 45%. For a rental with a market rent of $2,600, using the 75% convention, what is the highest PITIA she could qualify for — and what does that teach?

A. $1,350 — the DTI cap keeps her from ever buying a rental that would lose money

B. $3,950 — with all of the rent counted, the rental is certain to cash-flow

C. $1,950 — 75% of the rent is the most PITIA any lender will ever allow

D. $3,300 — enough to buy a money-losing rental, so approval does not prove a deal

5. 1 pt **Lesson 5.3**

In this example, a duplex lists for $310,000 with rents totaling $2,700 a month, and a triplex lists for $420,000 with rents totaling $3,900. What are their gross rent multipliers, and what is the main limit of the comparison?

A. About 9.6 and 9.0; the lower GRM proves the triplex has better cash flow

B. About 9.6 and 9.0; GRM compares price with rent but ignores expenses

C. About 115 and 108; GRM compares price with rent but ignores expenses

D. About 0.87% and 0.93%; GRM compares price with rent but ignores expenses

6. 1 pt **Lesson 6.1**

In this example, a wholesaler offers a house for $172,000 — a $158,000 contract plus a $14,000 assignment fee — claiming an ARV of $300,000 and a $30,000 rehab. Your sold comps support an ARV of $265,000, and your line-item rehab is $42,000. What should you do?

A. Offer no more than about $143,500 in total, or walk away

B. Buy, since $172,000 is $8,000 under the wholesaler’s 70% figure

C. Offer $158,000, the contract price before the fee

D. Offer up to $185,500, which is 70% of your own ARV

7. 1 pt **Lesson 7.1**

In this example, a flipper buys for $165,000 with an ARV of $280,000. Buyer closing is 2%; the rehab is $42,000 with a 10% contingency; a lender finances 85% of the price and all of the rehab at 11% with 2 points for 6 months; holding costs are $650 a month; selling costs are 8% of ARV. What is the profit before taxes?

A. About $47,616

B. About $39,200

C. About $25,216

D. About $29,731

8. 1 pt **Lesson 8.1**

In this example, rent is $1,750 and the written criterion is verifiable gross monthly income of at least 3 times the rent, counting all adults who will sign. Three roommates submit the first complete application, earning $1,900, $1,800 and $1,700. The landlord wants to reject them because “three roommates seem risky.” What should he do?

A. Reject them, since each roommate earns less than $5,250 on his or her own

B. Offer them the unit if they meet the rest; $5,400 tops the $5,250 minimum

C. Reject them, since a landlord may simply pick whichever applicants he likes

D. Ask them for extra documents that the other applicants need not provide

9. 1 pt **Lesson 9.1**

In this example, a rental’s basis is $285,000 (price plus settlement costs added to basis), and the assessor’s values put 30% in land. It is placed in service in August. Using the mid-month convention, about how much depreciation is allowed in the first year?

A. About $7,255

B. About $3,886

C. About $1,918

D. About $2,720

10. 1 pt **Lesson 10.1**

In this example, the next rental costs $230,000 with 25% down, $4,500 of closing costs and $2,500 of upfront repairs, and it needs its own six-month reserve with PITI of $1,480. The investor saves $1,600 a month from her job, and her three rentals, with full reserves, produce $120 a month each. About how long until she can buy?

A. About 33 months

B. About 38 months

C. About 46 months

D. About 29 months

11. (1 pt) **Lesson 1.4**

In this example, a 9-unit portfolio produces $1,980 a month of cash flow, and the owner's goal is $3,300 a month. At the current cash flow per door, how many doors would the goal take — and how many paid-off houses renting for $1,650, using the 50% rule?

A. $220 a door: 15 leveraged doors, or 4 paid-off houses

B. $220 a door: 15 leveraged doors, or 2 paid-off houses

C. $247.50 a door: 14 leveraged doors, or 4 paid-off houses

D. $165 a door: 20 leveraged doors, or 4 paid-off houses

12. (1 pt) **Lesson 2.2**

On an evening walking survey you count 13 "for rent" signs within four blocks of a duplex you are analyzing; a year ago a friend counted 3. How should this change your analysis?

A. Raise vacancy, recheck comps for falling rents and longer listings, and stress-test

B. Ignore it, since "for rent" signs say nothing about rents, demand or vacancy

C. Set the rent at the lowest price on any sign you saw, and change nothing else at all

D. Note who seems to live on the street, to help judge the neighborhood's class

13. (1 pt) **Lesson 3.2**

In this example, a rental renting for $1,950 a month has these components: roof $11,700 (26-year life), furnace and A/C $7,800 (16), water heater $1,560 (12), flooring $6,300 (9) and appliances $3,240 (12). What CapEx percentage belongs in the Rental worksheet?

A. About 0.7%

B. About 5.7%

C. 7.0%, the default

D. About 8.7%

14. (1 pt) **Lesson 4.2**

As of 2026, a veteran buying a fourplex with a VA loan wants the lender to count the other units' projected rent. Under the rules described in Lesson 4.2, what must he usually show?

A. Nothing, because VA counts all of the projected rent automatically at closing

B. Landlord experience or a property manager, plus at least six months of reserves

C. A 20% down payment, because VA loans on three- and four-unit homes require one

D. Proof that he will not be living in any of the four units of the building

15. (1 pt) **Lesson 5.4**

In this example, a seller's pro forma for a 12-unit building shows operating expenses of $48,000; your rebuild from the trailing twelve months and the tax and utility bills shows $72,000. The income figures agree. At a 7% market cap rate, by how much does the pro forma overstate the building's value?

A. About $342,857

B. $24,000

C. $168,000

D. About $1,028,571

16. (1 pt) **Lesson 6.2**

In a 1952 rental, a landlord pays a painter to sand 4 square feet of trim in one bedroom and, ten days later, 3 square feet more in the same bedroom. Under the EPA RRP rule as Lesson 6.2 explains it, is this exempt minor repair?

A. No; work in one room within 30 days counts together, and 7 sq ft is over 6

B. Yes; each job by itself stays under the 6-square-foot minor-repair limit

C. Yes; the RRP rule applies only to replacing windows, not to sanding trim

D. Yes; landlords doing work on their own rentals are not covered by the rule

17. 1 pt **Lesson 7.2**

In this example, a finished flip is still unsold after two months, and the comparable sales say its price is high. Its hard-money loan is $190,000 at 12% interest-only, and taxes, insurance and utilities run $700 a month. The agent suggests a $9,000 price cut. How many months of carrying cost does the cut equal?

A. About 4.7

B. About 12.9

C. About 3.5

D. About 0.3, so waiting is cheaper

18. 1 pt **Lesson 8.1**

A tenant whose disability is not obvious asks to keep an assistance animal in a no-pets building. What may the landlord ask for, as Lesson 8.1 describes current guidance?

A. Her full medical records and a diagnosis before he makes any decision at all

B. Reliable information on the disability and need — generally not medical records

C. Nothing, because any building with a no-pets rule may refuse every kind of animal

D. A standard pet deposit, refundable at move-out if the animal does no damage

19. 1 pt **Lesson 9.2**

In this example, Ms. Reyes bought a house for $260,000, lived in it as her main home for three years, then rented it for 18 months and claimed $9,500 of depreciation. She sells with an amount realized of $395,000 and has used no other exclusion. How much gain may she exclude under Section 121, and how much is taxable?

A. $144,500 excluded; nothing taxable

B. Nothing excluded, because she rented the house out

C. $135,000 excluded; $9,500 taxable

D. $90,000 excluded; $54,500 taxable, because the rental months are nonqualified use

20. (1 pt) **Lesson 10.2**

Two partners split a duplex's cash flow 50/50 every month and keep no reserves. In year 3 a $12,000 sewer replacement comes due, and one partner cannot pay his half. What should their agreement have required?

A. Nothing in writing, because partners should settle surprises informally

B. Reserves funded first, and a capital-call clause for a partner who cannot pay

C. That the operating partner pay for every repair out of his own share of cash

D. That the duplex be sold at once whenever any single repair exceeds $10,000

21. (1 pt) **Lesson 1.1**

A projection shows a rental losing $80 a month in cash flow but earning a strong total return, because it assumes 4% yearly appreciation. What test does Lesson 1.1 say a careful investor runs?

A. Raise appreciation to 5% to see how much upside the deal might really have

B. Count the appreciation as cash flow, since it is likely over a ten-year hold

C. Ignore the cash flow, since total return is always the better measure of a deal

D. Rerun the projection at 0% appreciation and buy only if the deal still works

22. (1 pt) **Lesson 2.3**

Four adjusted rent comps come to $1,640, $1,660, $1,675 and $1,910. What should you do before reconciling them?

A. Average all four, about $1,721, since more comps always give a better estimate

B. Use $1,910, since it shows the most the market will bear for this kind of unit

C. Use $1,640 to be safe, and set the other three comps aside entirely

D. Find out why the $1,910 comp differs, then drop it or adjust it further

23. (1 pt) **Lesson 3.3**

In this example, similar small apartment buildings trade at a 7.5% cap rate. A building's honest NOI is $49,500, and the seller asks $780,000. What value does the income support, and what cap rate would a buyer earn at the asking price?

A. $660,000; about 6.3% at the asking price

B. $371,250; about 6.3% at the asking price

C. $660,000; 7.5% at any price

D. $780,000; about 6.3% at the asking price

24. (1 pt) **Lesson 4.3**

An investor has reached Fannie Mae's ten-financed-property limit and turns to DSCR loans made to her LLC. Which statement about such loans matches Lesson 4.3?

A. They are qualified mortgages carrying the lowest rates available to any investor

B. Because the LLC is the borrower, she carries no personal liability on these loans at all

C. They qualify on rent, cost more, usually need a personal guarantee, and fix no bad deal

D. They are underwritten on her paycheck, so the property's rent does not matter

25. (1 pt) **Lesson 5.1**

A house hacker living in one unit of her own fourplex reads that some small owner-occupied buildings are exempt from parts of the Fair Housing Act. Which statement is correct?

A. She may advertise for whatever kind of tenant she personally prefers to live with

B. She may turn away families with children, because the building is also her home

C. Fair housing law applies only to buildings that have five or more rental units

D. The exemption never covers advertising, and her state may not exempt her at all

26. (1 pt) **Lesson 6.3**

In this example, a rehab has $46,000 of line items and a 15% contingency. During demolition the crew finds rotted subfloor ($2,800), the panel needs an upgrade ($1,600) and the inspector requires hardwired alarms ($500). The owner is tempted by a $2,400 counter upgrade. How much contingency is left, and what should she do?

A. $6,900; approve the upgrade, since it fits in the contingency

B. $2,000; decline the upgrade and keep the rest for surprises

C. $4,900; approve the upgrade, since money remains

D. $2,000; approve the upgrade and drop the alarms instead

27. (1 pt) **Lesson 7.3**

In this example, a short-term rental's fixed costs are taxes $2,800, insurance $2,200, utilities $380 a month and other costs $250 a month, plus $13,200 of annual debt service. Repairs, CapEx and management together take 40% of revenue. At an ADR of $180, what occupancy breaks even?

A. About 39.2%

B. About 54.9%

C. About 65.3%

D. About 31.9%

28. (1 pt) **Lesson 8.2**

A lease form found online says, "Tenant waives all rights to notice before Landlord enters." What does Lesson 8.2 say about such a clause?

A. It is enforceable, because the tenant read the whole lease and signed it willingly

B. Likely void: a tenant cannot waive the state's entry-notice rule, which overrides it

C. It is enforceable in fixed-term leases, but not in month-to-month tenancies

D. It is enforceable as long as the landlord agrees to waive all late fees in return

29. (1 pt) **Lesson 9.3**

In this example, an investor's rental has an adjusted basis of $180,000 and sells with an amount realized of $460,000. Her $240,000 loan is paid off, and the qualified intermediary holds the other $220,000. She buys a $410,000 replacement with all $220,000 and a new $190,000 loan, adding no cash. How much gain is recognized?

A. $0

B. $50,000

C. $280,000

D. $230,000

30. 1 pt **Lesson 10.3**

In this example, an owner saves $1,800 a month, and her three rentals produce cash flow of $150, $180 and $210 a month. The smallest loan, on the house producing $150, has a $1,050 payment. After that loan is paid off, what is the monthly snowball toward the next loan?

A. $3,390

B. $2,340

C. $3,240

D. $3,540

31. 1 pt **Lesson 1.3**

Which strategy on the course's strategy map commonly needs the most capital up front and the most skill — estimating repairs, managing contractors and predicting appraisals?

A. The BRRRR strategy

B. A house hack on an FHA loan

C. A long-term rental with 25% down

D. A furnished mid-term rental

32. 1 pt **Lesson 2.4**

In this example, an investor estimated a BRRRR's ARV at $340,000, but the refinance appraisal comes in at $310,000. The lender refinances at 75% of appraised value. How much more of her cash stays in the deal than she planned?

A. $30,000

B. $21,000

C. $22,500

D. $7,500

33. 1 pt Lesson 3.2

Why does the Deal Analyzer figure repairs and CapEx on scheduled rent but management on collected rent?

A. Because lenders require that split on every residential loan application they take

B. Because management is a form of debt payment rather than an operating expense

C. Because vacancy never changes the amount a property manager is paid in a year

D. Buildings wear out whether rented or not, but managers are paid on rent collected

34. 1 pt Lesson 4.4

A seller behind on his payments offers to deed you his house “subject to” his existing mortgage, which you would keep paying in his name. Why does Lesson 4.4 say this is not for beginners?

A. Subject-to purchases are illegal in every state, whatever the circumstances may be

B. Due-on-sale risk, his credit tied to your payments, and tangled insurance and escrow

C. Your own credit is ruined whenever the seller misses one of his own payments

D. Lenders always approve such transfers in writing, so there is no real benefit to it

35. 1 pt Lesson 5.2

Before renting a four-bedroom house by the room, what should the owner check first, according to Lesson 5.2?

A. Rooming-house licensing, limits on unrelated adults, and bedroom alarms and egress

B. Only whether the total of all the room rents beats renting the house as a whole

C. Whether the booking platforms’ fees are lower than the rates of nearby hotels

D. Whether the combined room rents would pass the 1% rule on the house’s purchase price

36. 1 pt **Lesson 6.4**

In this example, an investor buys for $150,000 with $3,500 of closing costs and a $45,000 rehab. A hard-money lender funds 90% of the price and all of the rehab at 12% with 2 points for 6 months; holding costs are $550 a month. The refinance is 75% of a $255,000 appraisal with $5,000 of closing costs. How much cash is left in the deal?

A. $6,250

B. $36,200

C. $15,550

D. $29,950

37. 1 pt **Lesson 7.3**

A city allows short-term rentals only in the owner’s primary residence. An investor wants to buy a second house nearby and rent it by the night. How should she analyze the purchase?

A. With nightly rents, after listing a relative as the owner-occupant of the house

B. With nightly rents, since enforcement of such local rules is uncommon in practice

C. With nightly rents, signing 30-day leases but letting guests leave after three nights

D. With long-term or 30-day-plus rents, since nightly rental there breaks the rule

38. 1 pt **Lesson 8.3**

A tenant is three weeks late with rent when the furnace fails in January. What must the landlord do?

A. Repair it promptly and handle the late rent separately through lawful notice

B. Wait to repair the furnace until all of the late rent has been paid in full

C. Repair it only if the tenant first agrees to pay for the replacement parts

D. Lend the tenant a space heater and replace the furnace at the next turnover

39. (1 pt) **Lesson 9.4**

A landlord plans to deed her mortgaged rental into a new LLC for liability protection. What does Lesson 9.4 say to do first?

A. Nothing more, because federal law protects every transfer of a home to an LLC

B. Cancel her umbrella policy, because the new LLC will now protect her instead

C. Ask the lender in writing and see an attorney: the deed can trigger due-on-sale

D. Merge the rental's books with her own, because the LLC now owns the property

40. (1 pt) **Lesson 10.4**

In composite case 5, a buyer waived the sewer scope to win a bidding war and used 3% CapEx "because the house looked fine." Within eighteen months he paid for a sewer line and a roof. Which safeguards would have prevented the surprise?

A. A sewer scope, CapEx from component ages, and an offer that prices in replacements

B. A higher appreciation assumption, so that growth would offset the repair costs

C. Waiving the inspection even sooner, so that the bidding war could be won faster

D. A lower vacancy estimate, so that more cash would be left free for the repairs

41. (1 pt) **Lesson 1.2**

In the years after 2006, which investors were generally hurt worst, according to Lesson 1.2?

A. Those with fixed-rate loans, positive cash flow and reserves who kept collecting rent

B. Those who paid cash for a few modest rentals spread across several different towns

C. Those with little down, adjustable or interest-only loans, negative cash flow, no reserves

D. Those who put 25% down and held their properties all the way through the downturn

42. (1 pt) **Lesson 2.5**

As of 2026, an Oregon landlord who owns three rental houses ends a month-to-month tenancy after the first year because his daughter will move in. Under ORS 90.427 as Lesson 2.5 describes it, what is required?

A. 90 days' written notice with the reason, plus a payment equal to one month's rent

B. Only 30 days' notice, because a family move-in does not count as a termination at all

C. 90 days' written notice with the reason; no payment, since he owns under five units

D. Nothing at all, because any month-to-month tenancy may end without a reason

43. (1 pt) **Lesson 3.5**

A deal stays positive on every single row of the Rental worksheet's stress test, but when you lower rent 10% and raise the rate 1 point together it loses about $90 a month. What does Lesson 3.5 say this teaches?

A. Combined tests are unrealistic, so they may safely be left out of any analysis

B. Only the rent row matters, because the interest rate on a loan never changes

C. The deal is safe, because it stayed positive on each single change in the stress table

D. Bad news often comes together, so test combinations, hold reserves and want margin

44. (1 pt) **Lesson 4.5**

In this example, a family home is worth $480,000 with a $300,000 mortgage, and a lender allows 85% CLTV. The family would draw $50,000 at 8.75% interest-only toward a rental. What line is available, and what would the monthly payment be if the rate rose to 10.75%?

A. $180,000; about $447.92

B. $108,000; about $364.58

C. $108,000; about $447.92

D. $408,000; about $447.92

45. (1 pt) **Lesson 5.3**

A fourplex house hack loses about $150 a month as a full rental today. Which move-out plan matches the slow, steady path Lesson 5.3 recommends?

A. Move out after the first year and raise every unit to full market rent at once

B. Stay, raise rents fairly at renewals, and leave once it cash-flows with management

C. Move out right away and cover the monthly loss from the next house hack's savings

D. Stop counting management, since she will manage the building from across town

46. (1 pt) **Lesson 6.4**

As of 2026, an investor paid cash for a house and then spent $40,000 on its rehab. She hopes Fannie Mae's delayed-financing exception will return all of it within six months. What does Lesson 6.4 say?

A. It lends a full 75% of the new appraised value, which returns the rehab money too

B. The loan is capped at the documented purchase cost plus loan costs, so rehab stays in

C. It applies only to houses that were bought with a hard-money loan in the first place

D. It requires a full twelve months of seasoning before any cash may come out

47. (1 pt) **Lesson 7.4**

An investor models a furnished mid-term rental using unfurnished long-term rent comps and a long-term rental's expense percentages. What should the investor do instead?

A. Nothing; furnished and unfurnished homes rent for about the same amount anyway

B. Lower the expense percentages, since mid-term rentals have no vacancy at all

C. Use furnished comps, plus owner-paid utilities, a furnishing reserve and gap vacancy

D. Leave out landlord–tenant costs, since mid-term tenants are really hotel guests

48. (1 pt) **Lesson 8.4**

In this example, rent is $1,900. A nonpaying tenant leaves after two unpaid months and a court judgment; legal costs are $1,800 and repairs $1,000, and re-renting takes one month. If such an event happens about once every four years, how much vacancy and credit loss does it add?

A. About 37.3% of the year's rent

B. About 7.2% of the year's rent

C. About 6.3% of the year's rent

D. About 9.3% of the year's rent

49. (1 pt) **Lesson 9.4**

Heavy rain is forecast for next week, and a landlord realizes his rental in a low-lying area has no flood coverage. What does Lesson 9.4 say about buying an NFIP policy now?

A. His landlord policy already covers flood damage, so he needs nothing more

B. An NFIP policy takes effect on the same day it is bought and paid for

C. It generally takes effect 30 days after application and payment — too late

D. Flood coverage comes automatically with any personal umbrella policy

50. (1 pt) **Lesson 10.5**

In this example, a capstone student back-solves an offer of $210,000 on a house with NOI of $14,600. At 25% down on a 7%, 30-year loan, P&I is $1,047.85 a month, and cash invested would be $61,500. Her written criteria are a DSCR of at least 1.25 and cash-on-cash of at least 6%. What are the DSCR and cash-on-cash at the offer, and the verdict?

A. About 1.16 and 3.3%; buy, since the cash flow is positive and the DSCR tops 1.0

B. About 0.86 and 3.3%; walk away, since the income does not cover the loan

C. About 1.16 and 23.7%; buy, since that return comfortably beats her 6% target

D. About 1.16 and 3.3%; it fails both criteria, so state a lower price or walk away

51. 1 pt **Lesson 1.5**

On the printed Rental worksheet, an investor writes the source beside each input. Which set of sources follows Lesson 1.5?

A. Rent from the seller's flyer; insurance from last year's homeowner bill; rate from a friend's loan

B. Rent from the agent's three comps; insurance from a landlord quote; rate from the Loan Estimate

C. Rent from the highest nearby listing; repairs from the seller's estimate; management at zero

D. Rent from the current lease; taxes from the seller's old bill; CapEx at zero for a new roof

52. 1 pt **Lesson 2.5**

As of 2026, an individual in Washington has lived in one unit of her fourplex since before her tenants moved in and still lives there. She plans a rent increase. Which statement is correct under RCW 59.18 as Lesson 2.5 describes it?

A. She is bound by the 9.683% cap for 2026, like every other landlord in Washington

B. She may raise rent with no notice at all, because owner-occupied buildings are exempt

C. The exemption removes the percentage cap, but 90 days' written notice still applies

D. She is exempt only if she owns the fourplex through an LLC with a corporate member

53. 1 pt **Lesson 3.4**

In a high-priced Pacific Northwest city, almost no house passes the 1% rule. Which response treats the rule the way Lesson 3.4 teaches?

A. Buy anyway, counting on appreciation to make up for the negative cash flow

B. Raise the rent estimate until the house passes, then run the full worksheet

C. Treat it as a screen; weigh a house hack, more cash down or another market

D. Switch to the 2% rule, which was designed for the most expensive markets

54. (1 pt) **Lesson 4.5**

Freddie Mac's survey showed 30-year mortgage rates of 18.63% in October 1981 and 2.65% in January 2021. What does Lesson 4.5 draw from that history for a young investor?

A. Rates always return to about 3% in time, so buy now and plan on refinancing later

B. Rates only fall over the long run, so variable-rate loans are the safest choice to make

C. Rates matter to banks, not to small investors who have fixed monthly payments

D. Rates can't be predicted, so buy deals that survive higher ones; never bank on a refinance

55. (1 pt) **Lesson 5.5**

As of 2026, under ORS 197A.425 as Lesson 5.5 describes it, what must an Oregon city of more than 2,500 people do about ADUs inside its urban growth boundary?

A. Allow at least one ADU per detached home, without owner-occupancy or parking rules

B. Allow ADUs only on lots where the owner lives in the main house or in the ADU itself

C. Allow at least two ADUs per lot and drop every local limit on short-term rentals

D. Allow ADUs only in those areas already zoned for small apartment buildings

56. (1 pt) **Lesson 6.5**

An investor with five refinanced BRRRR rentals and little cash says, "I'm safe — I have $200,000 of equity." What does Lesson 6.5 say is wrong with that?

A. Nothing; equity in a rental property works just the same as cash in the bank does

B. Equity does not matter, because property values never fall very far or for very long

C. Equity is taxed each year, so the cushion steadily shrinks as time goes on

D. Equity needs a sale or refinance, which may fail in a downturn; cash pays the bills

57. 1 pt **Lesson 7.5**

A student comparing five strategies for one house uses $2,100 of rent in the Rental worksheet but $2,350 in the BRRRR worksheet "because the rehab will be nicer." What principle of Lesson 7.5 does this break?

A. The property facts stay fixed; only what the strategy itself changes may differ

B. Each strategy should use whichever rent estimate makes that strategy look best

C. Every worksheet must use the rent that exactly meets the 1% rule for the price

D. The BRRRR worksheet should always use the seller's pro forma rent for the house

58. 1 pt **Lesson 8.5**

An owner's property manager turned away a qualified family because they had young children. Who may be liable, and what should the owner have done beforehand?

A. Only the manager, because hiring a manager transfers the owner's legal duties

B. Both may be; the owner should have reviewed the manager's criteria and practices

C. No one, because the familial-status protection covers only pregnant applicants

D. Only the owner, and then only if the family files a complaint with the city

59. 1 pt **Lesson 9.5**

A landlord's owner statements show positive cash flow every month for two years, yet the CapEx reserve account is empty. What has gone wrong?

A. Nothing; CapEx is a tax deduction, so no separate account is needed

B. The reserve should have been recorded as an expense on Schedule E

C. The reserve transfers were never made, so cash flow was overstated

D. Two years of positive cash flow prove the reserve was never needed

60. 1 pt **Lesson 10.5**

A capstone memo's verdict reads simply, "Negotiate." What does Lesson 10.5 say it is missing?

A. A specific price from the back-solve at which the deal meets the stated criteria

B. A written promise from the seller's agent that the seller will accept some offer

C. A projected appreciation rate that would justify paying the full asking price

D. Nothing; "negotiate" is a complete verdict, since prices are always negotiable

ANSWER KEY

1. D. LTV = loan ÷ value: $\$280{,}500 \div \$330{,}000 = 85\%$. After a 10% fall the value is $297,000 while the loan is unchanged: $\$280{,}500 \div \$297{,}000 \approx 94.4\%$. The equity cushion shrinks from $49,500 to $16,500 — two-thirds gone. Choice C lowers the LTV as if the loan fell along with the value; it is the value that falls, and the loan stays put. Choice B gives the equity share, not the LTV.
2. B. R: annual rent $\$1{,}650 \times 12 = \$19{,}800$; taxes $\$210{,}000 \times 0.019 = \$3{,}990$; left $\$19{,}800 - \$3{,}990 - \$1{,}600 = \$14{,}210$, or $\$14{,}210 \div \$210{,}000 \approx 6.8\%$. S: $\$24{,}600 - \$2{,}240 - \$1{,}300 = \$21{,}060$, or $\$21{,}060 \div \$280{,}000 \approx 7.5\%$. S wins despite its higher price-to-rent ratio (about 11.4 against 10.6), because its taxes are far lower. Choice A compares gross rent with price and ignores taxes and insurance; choice C is the tempting shortcut, but a low price-to-rent ratio does not show the tax and insurance burden.
3. A. Break-even occupancy $= (\$12{,}480 + \$15{,}960) \div \$31{,}200 = \$28{,}440 \div \$31{,}200 \approx 91.2\%$. The property must collect about 91% of its scheduled income just to pay every bill — about a month of vacancy away from a loss. Choice B counts only the debt service and choice C only the operating expenses; the measure needs both.
4. D. Room for new debt: $0.45 \times \$9{,}000 - \$2{,}700 = \$1{,}350$. Net rental income may be as low as −$1,350: $0.75 \times \$2{,}600 - \text{PITIA} \geq -\$1{,}350$, so $\text{PITIA} \leq \$1{,}950 + \$1{,}350 = \$3{,}300$. A $3,300 payment on a $2,600 rental loses money every month; the lender judges her ability to repay from all income, while the investor must judge whether the property pays. Choice B counts 100% of the rent, which lenders commonly do not.
5. B. GRM = price ÷ annual gross rent: $\$310{,}000 \div \$32{,}400 \approx 9.6$ and $\$420{,}000 \div \$46{,}800 \approx 9.0$. The triplex costs less per dollar of rent, but GRM says nothing about owner-paid utilities, taxes, CapEx or vacancy, so it is a quick comparison, not a verdict. Choice A is the tempting overreach; choice C divides by monthly rent; choice D gives the rent-to-price ratios.
6. A. On your numbers the maximum is $\$265{,}000 \times 0.70 - \$42{,}000 = \$143{,}500$, so $172,000 is $28,500 too high. The wholesaler's figures give $\$300{,}000 \times 0.70 - \$30{,}000 = \$180{,}000$, which is why the deal "passes" on paper. Choice D forgets to subtract the rehab, and choice C forgets that the assignment fee is part of your price. Wholesaler numbers that pass are not your numbers.
7. C. Rehab with contingency $\$42{,}000 \times 1.10 = \$46{,}200$; loan $0.85 \times \$165{,}000 + \$46{,}200 = \$186{,}450$; interest $\$186{,}450 \times 0.11 \div 12 \times 6 \approx \$10{,}254.75$; points

$3,729; closing $3,300; holding $3,900; selling $280,000 × 0.08 = $22,400. Total cost $254,783.75, so profit = $280,000 − $254,783.75 = $25,216.25. Choice A leaves out selling costs; choice B leaves out interest and points as if the loan were free; choice D skips the contingency. The price is also $11,000 over the 70% ceiling of $154,000.

8. B. Minimum income $1,750 × 3 = $5,250; combined $1,900 + $1,800 + $1,700 = $5,400. The written rule counts all signers, and their complete application came first, so they qualify if they meet the other criteria. Choice A applies the rule to each person separately, contrary to the written policy; rejecting them on a feeling (C) or asking extra documents of them alone (D) is the inconsistency where fair housing claims begin.

9. D. Building basis $285,000 × 0.70 = $199,500; full year $199,500 ÷ 27.5 ≈ $7,254.55. August counts as 4.5 months: $7,254.55 × (12.5 − 8) ÷ 12 ≈ $2,720. Choice A ignores the mid-month convention, choice B depreciates the land too, and choice C uses the 39-year nonresidential period.

10. B. Cash needed $57,500 + $4,500 + $2,500 + 6 × $1,480 = $73,380; monthly savings $1,600 + 3 × $120 = $1,960; $73,380 ÷ $1,960 ≈ 37.4, so about 38 months. Choice A leaves out the new property's reserve — the shortcut that leaves every property under-protected — and choice C ignores the rentals' cash flow.

11. A. Cash flow per door = $1,980 ÷ 9 = $220, so the goal takes $3,300 ÷ $220 = 15 leveraged doors. A paid-off house nets about 0.50 × $1,650 = $825, so $3,300 ÷ $825 = 4 houses. Choice B divides the goal by the full rent, forgetting that expenses never stop on a paid-off house; choice C divides by 8 doors instead of 9. Fifteen roofs and mortgages or four paid-off houses: the same income with very different risk.

12. A. A jump in for-rent signs suggests rising supply or falling demand — new units, an employer cutting jobs or rents set too high. Reflect it in the numbers: a higher vacancy input, careful leased comps and the "Vacancy +5 points" stress row. Choice D is never allowed: a neighborhood is judged by buildings, streets and economics, not by people.

13. D. Yearly amounts: $450 + $487.50 + $130 + $700 + $270 = $2,037.50, about $169.79 a month. Annual rent is $1,950 × 12 = $23,400, so $2,037.50 ÷ $23,400 ≈ 8.7%. Choice A divides the monthly reserve by the annual rent; choice B leaves out the flooring. A component table built from real ages beats the 7% default for this house.

14. B. VA counts prospective rent from the other units only if the veteran shows landlord experience or a property manager and six months of reserves;

otherwise he must qualify on his own income. VA loans can require no down payment (C is false), and every VA loan requires the veteran to live in the home (D reverses the rule).

15. A. The pro forma overstates NOI by $\$72{,}000 - \$48{,}000 = \$24{,}000$, and value is NOI ÷ cap rate, so it overstates value by $\$24{,}000 \div 0.07 \approx \$342{,}857$. That is why five-plus-unit buildings are valued on documented trailing-twelve-month NOI, not projections. Choice B stops at the NOI difference, and choice C multiplies by 7 instead of dividing by 0.07.

16. A. The RRP rule covers paid work that disturbs paint in pre-1978 housing beyond the minor-repair limit of 6 square feet per room inside. EPA counts work in the same room within 30 days together, so $4 + 3 = 7$ square feet is covered work requiring a lead-safe certified firm and lead-safe practices. Choice B is the tempting split-the-job answer, and landlords are covered (D is false).

17. C. Monthly carrying cost $= \$190{,}000 \times 0.12 \div 12 + \$700 = \$1{,}900 + \$700 = \$2{,}600$; $\$9{,}000 \div \$2{,}600 \approx 3.5$ months. If the cut sells the house more than about three and a half months sooner, it costs less than waiting — and it removes the risk of a softening market. Choice A counts interest but not holding costs; choice B counts holding but not interest.

18. B. Allowing an assistance animal in a no-pets building is a common reasonable accommodation. When the need is not obvious, a landlord commonly may ask for reliable information about the disability and the need, but generally should not demand a diagnosis or medical records; check current HUD and state guidance. No pet fee or pet deposit may be charged (D), though the tenant remains responsible for actual damage.

19. C. Adjusted basis $\$260{,}000 - \$9{,}500 = \$250{,}500$; gain $\$395{,}000 - \$250{,}500 = \$144{,}500$. She owned and lived there 3 of the last 5 years, so she meets the tests, and rental time after her last use as a main home, within the 5-year window, is not nonqualified use (D is wrong). But depreciation after May 6, 1997 is never excluded: $\$144{,}500 - \$9{,}500 = \$135{,}000$ is excluded and $9,500 is taxed as unrecaptured Section 1250 gain. Choice A forgets the depreciation rule. (Education, not tax advice.)

20. B. Distributing every dollar of cash flow is one of Lesson 10.2's classic mistakes. A written agreement funds reserves first and says how capital calls work, including what happens to a partner who cannot meet one. Choice A is the handshake approach that ended composite case 6 in court.

21. D. Appreciation is never promised and cannot pay the mortgage, while the negative cash flow is certain. Lesson 1.1 has the investor run the projection with

appreciation at 3% and at 0% and buy only if the 0% version works. Choice B is the classic mistake of counting appreciation as cash flow.

22. D. If adjusted comps spread widely, look for the reason rather than averaging blindly: the outlier may be renovated, furnished, on a better street or still unleased at an asking rent. The three that agree point to about $1,650–$1,675. Choice A averages an unexplained outlier into the estimate, raising it about $50 a month.

23. A. Value $= \$49{,}500 \div 0.075 = \$660{,}000$. At $780,000 the buyer earns only $\$49{,}500 \div \$780{,}000 \approx 6.3\%$ — paying $120,000 for income the building does not produce. Choice B multiplies NOI by 7.5 instead of dividing by 0.075; choice C forgets that a higher price lowers the cap rate the buyer earns.

24. C. DSCR loans sit outside the qualified-mortgage rules and qualify the property mainly on its rent, often at higher rates and fees and with prepayment penalties. They help investors past the financed-property limit, but they are commonly made with a personal guarantee, so B is the classic LLC misconception — and a loan approval never makes a weak deal strong.

25. D. Federal law exempts some owner-occupied buildings of four or fewer units from parts of the Act, but never from its advertising rules, and many states and cities have no such exemption. The safe and right course is to treat every applicant by the same written standard. Choices A and B misuse the narrow exemption, and C invents a limit the law does not have.

26. B. Contingency $= 0.15 \times \$46{,}000 = \$6{,}900$; necessary overruns $\$2{,}800 + \$1{,}600 + \$500 = \$4{,}900$; left $\$6{,}900 - \$4{,}900 = \$2{,}000$. The $2,400 upgrade would exceed what remains while work is unfinished. Choice A forgets the overruns already spent and choice C confuses the amount spent with the amount left; required safety work is never the thing to cut (D).

27. C. Fixed costs plus debt: $\$2{,}800 + \$2{,}200 + \$4{,}560 + \$3{,}000 + \$13{,}200 = \$25{,}760$. Break-even revenue $= \$25{,}760 \div (1 - 0.40) \approx \$42{,}933$. Occupancy $= \$42{,}933 \div (\$180 \times 365) = \$42{,}933 \div \$65{,}700 \approx 65.3\%$. Choice A forgets the costs that rise with revenue; choice B adds 40% to the fixed costs instead of dividing by the 60% that is left; choice D leaves out debt service. A small drop in bookings is a large drop in cash.

28. B. State statutes override lease clauses that conflict with them, and a tenant's "waiver" of rights the statute guarantees is commonly void. Replace the clause with your state's rule — commonly 24 to 48 hours' notice except in emergencies. Choice A is the tempting belief that a signature makes any clause enforceable.

29. B. Realized gain $\$460{,}000 - \$180{,}000 = \$280{,}000$. She took no cash, but net debt relief is $\$240{,}000 - \$190{,}000 = \$50{,}000$, which is boot. Recognized gain $= \min(\$280{,}000, \$50{,}000) = \$50{,}000$; the other $230,000 is deferred. Choice A is the tempting answer — reinvesting all the cash is not enough when the new loan is smaller than the old one. Borrowing $240,000 or adding $50,000 of her own cash would have avoided the boot.

30. A. Before the payoff the snowball is $\$1{,}800 + \$150 + \$180 + \$210 = \$2{,}340$. Once the first loan is gone, that house's whole NOI — its old payment plus its cash flow — joins: $\$1{,}800 + (\$1{,}050 + \$150) + \$180 + \$210 = \$3{,}390$. Choice B is the first snowball, and choice C adds the freed payment but forgets that house's own cash flow.

31. A. BRRRR often requires cash or short-term loans for both the purchase and the rehab before any refinance, and it rewards rehab, contractor and appraisal skills a beginner has not yet built. A house hack (B) needs the least capital, which is why the course calls it the beginner's doorway.

32. C. The refinance loan is appraised value × LTV, so a $30,000 lower appraisal cuts the loan by $\$30{,}000 \times 0.75 = \$22{,}500$, and that much more cash stays in the deal. Choice A is the whole appraisal gap, but only 75% of it was ever going to be lent; choice B is the 70% rule's sensitivity, which applies to a flip offer. Conservative ARVs from renovated sold comps protect the investor.

33. D. Repairs and CapEx follow the building, which ages occupied or not, so they use gross scheduled income; managers are commonly paid a percent of rent collected. Other tools use slightly different conventions — management on scheduled rent, CapEx as a dollar figure — and that is fine if one convention is used consistently. Choice C reverses the logic: management falls when rent is not collected.

34. B. Subject-to is legal in many situations but carries due-on-sale risk, exposes the seller's credit to the buyer's payments, tangles insurance and escrow, and usually involves a distressed seller who deserves plain, fair dealing. Choice C reverses whose credit is at risk — the loan stays in the seller's name — and A overstates the law.

35. A. Many cities define a rooming house as a separate use, limit the number of unrelated adults or require a rental license, smoke and carbon-monoxide alarms and egress windows in every sleeping room. An illegal bedroom is a hazard and a liability. Choice B is the classic mistake of comparing gross rents — and the legal check comes before any numbers.

36. D. Short-term loan $0.90 \times \$150{,}000 + \$45{,}000 = \$180{,}000$; interest $\$180{,}000 \times 0.12 \div 12 \times 6 = \$10{,}800$; points $3,600; holding $3,300. All-in $\$150{,}000 + \$3{,}500 + \$45{,}000 + \$3{,}300 + \$10{,}800 + \$3{,}600 = \$216{,}200$; cash in $\$216{,}200 - \$180{,}000 = \$36{,}200$. Refinance loan $\$255{,}000 \times 0.75 = \$191{,}250$; cash out $\$191{,}250 - \$180{,}000 - \$5{,}000 = \$6{,}250$; left in $\$36{,}200 - \$6{,}250 = \$29{,}950$. Choice A is the cash out, and choice C leaves interest and points out of the all-in cost.

37. D. A rental that is not allowed has no value as a short-term rental, so the second house must be judged on what it may lawfully earn. Choices A, B and C are all ways of getting around the rule, which this course rejects; an illegal rental can be fined or shut down, and the investment depends on permission the owner does not control.

38. A. No heat in winter is an emergency repair, and the warranty of habitability does not pause when rent is late; withholding repairs can also look like retaliation. Late rent is handled through the lease and the state's notice process. Choice B is the tempting but unlawful trade.

39. C. Moving a mortgaged rental into an LLC transfers title and can trigger the due-on-sale clause; the federal law that protects certain transfers, such as into a living trust, does not list transfers to an LLC. An LLC also does not replace insurance (B), and commingling funds (D) can lead a court to disregard it.

40. A. The lesson's safeguards are never to waive key inspections, to base CapEx on the real ages of the roof, furnace, water heater and sewer line, and to price the offer accordingly. Choices B and D massage other inputs instead of facing the repairs — the confirmation bias the lesson warns about.

41. C. The lesson names a shared profile: thin equity, adjustable or interest-only loans, negative cash flow covered from a paycheck, concentration in one booming town and no reserves. When jobs disappeared they could neither sell (they were underwater) nor wait (they had no cash). Investors with fixed rates, cash flow and reserves (A) mostly kept their properties and recovered.

42. C. After the first year, Oregon lets a month-to-month tenancy end only for tenant cause or a listed landlord reason, such as an immediate family member moving in, generally with 90 days' notice and one month's rent — but owners of four or fewer units do not owe the payment. Choice A would be right for a landlord with more than four units. Recheck the statute before sending any notice.

43. D. A recession can lower rents and raise vacancy or rates in the same year, so careful investors test at least one combination and keep a cash reserve sized for

it. Choice C is the tempting answer, but single-row tests understate the risk when shocks come together.

44. C. Line $= \$480{,}000 \times 0.85 - \$300{,}000 = \$108{,}000$. At 10.75% the interest-only payment is $\$50{,}000 \times 0.1075 \div 12 \approx \$447.92$, up from about $364.58 at 8.75%. Choice A ignores the CLTV cap and choice D forgets to subtract the existing mortgage. A variable rate moves the payment without your permission, and the debt is secured by the house the family sleeps in.

45. B. Many owners find it easiest to stay a few years, pay the loan down, raise rents fairly as leases renew and buy the next property only when the first would cash-flow without them. Choice A ignores lease terms and notice rules; choice D hides a real cost — the deal must work with management included.

46. B. Fannie Mae's exception lets a buyer who paid cash refinance within six months, but the new loan may be no more than the documented purchase investment plus the new loan's costs, so rehab spending must wait for standard seasoning or another lender. Choice C reverses the rule — the exception is for purchases made with cash and no mortgage.

47. C. Furnished rentals with utilities included rent for more than unfurnished ones but carry more costs: utilities and internet, supplies, a furnishing reserve, more management and vacancy from the gaps between stays. Use furnished comps and those costs together. Choice D is false — stays of 30 days or more are commonly tenancies — and the gaps between stays make vacancy real (B).

48. D. Total cost $= 2 \times \$1{,}900 + \$1{,}800 + \$1{,}000 + \$1{,}900 = \$8{,}500$; yearly allowance $\$8{,}500 \div 4 = \$2{,}125$; share of rent $\$2{,}125 \div \$22{,}800 \approx 9.3\%$. Choice A forgets to spread the cost over four years; choice B leaves out the month to re-rent; choice C counts only the lost rent. Careful screening and early conversations usually cost far less.

49. C. Standard property policies generally exclude flood, and federal rules make a new NFIP policy generally take effect on the 30th day after application and payment, with certain exceptions such as a purchase tied to a loan closing. Flood insurance must be bought before the water rises. Choice A is the common and costly assumption.

50. D. Debt service $\$1{,}047.85 \times 12 = \$12{,}574.20$; DSCR $\$14{,}600 \div \$12{,}574.20 \approx 1.16$; cash flow $\$14{,}600 - \$12{,}574.20 = \$2{,}025.80$; cash-on-cash $\$2{,}025.80 \div \$61{,}500 \approx 3.3\%$. Both miss her written criteria, so the honest verdict names a lower price that meets them or walks away. Choice A abandons written criteria because the cash flow is positive; choice B inverts the DSCR; choice C divides NOI, not cash flow, by the cash invested.

51. B. Each team member supplies a specific input: the agent's comps produce rent, the lender's Loan Estimate supplies the rate, closing costs and mortgage insurance, and the insurance agent's landlord-policy quote supplies insurance. The other choices rely on the seller's or a salesperson's numbers — the classic mistake — and D adds two more: the seller's old tax bill and zero CapEx.
52. C. Washington exempts a duplex, triplex or fourplex whose individual owner lived in a unit when the tenancy began and still does, but the exemption removes only the cap; the 90-day written notice still applies. The exemption does not apply to REITs, corporations or LLCs with a corporate member, so D reverses the rule, and B treats an exemption as total.
53. C. In high-price markets investors buy with far more cash, house hack, invest elsewhere — or buy for appreciation, which the lesson calls a bet, not a plan. A rule of thumb only screens; the full worksheet measures. Choice B massages an input to pass a screen, and the 2% rule (D) is stricter, not looser.
54. D. The thrift crisis and the forty-year fall that followed show that no one predicts rates reliably. A plan that depends on refinancing at a good rate is a bet; fixed rates on long holds and deals that work at higher rates are the protection. Choice A is the tempting assumption the lesson warns against.
55. A. Oregon requires cities of more than 2,500 people and counties of more than 15,000 to allow at least one ADU for each detached single-unit dwelling in areas zoned for detached homes inside the urban growth boundary, and forbids owner-occupancy and added off-street parking requirements as siting and design rules. Choice C borrows Washington's two-ADU rule — and even Washington lets cities restrict ADUs used as short-term rentals.
56. D. Selling costs 6–8% and takes months, and a refinance needs a lender, an appraisal and enough DSCR — all of which can fail exactly when cash is needed. In the lesson's portfolio example, a 15% fall in values erased 60% of the equity. Choice A is the classic mistake of counting equity as safety.
57. A. Only when the facts are fixed do the differences come from the strategy itself. Changing the rent or ARV between strategies lets a favorite win unfairly — the lesson's first classic mistake. If the plan truly includes a bigger rehab, that rehab and its comp-supported rent belong in every worksheet.
58. B. Familial status protects families with children under 18, and a manager's fair housing violation can become the owner's problem; hiring a manager does not remove the owner's legal responsibility. Choice A is the classic mistake Lesson 8.5 names.

59. C. The monthly close includes transferring the planned repairs and CapEx percentages into a separate reserve account, and the owner statement should show the transfer and the balance. A CapEx reserve is savings until it is spent, not a deduction (A, B); when the roof or furnace fails, an empty reserve means new debt or a forced sale.
60. A. The three verdicts are buy at the asking price, negotiate to a stated price, or walk away — and "negotiate" means a specific number from the back-solve, with the reasons. A verdict without a stated price is one of the lesson's classic mistakes, and appreciation is never the justification (C).