Real Estate License National Portion

Adult · Career | 8 pages

Property, estates and encumbrances, land description, contracts, agency, listings, financing, appraisal, title and closing, leases, fair housing, disclosures, environmental issues and real estate math, with original practice problems. Not affiliated with any testing company or state commission. State law portions vary: check with your state's real estate commission.

1 The exam · 2 Real property · 3 Metes & bounds · 4 Rectangular survey · 5 Estates · 6 Ownership · 7 Encumbrances · 8 Government & taxes · 9 Environmental · 10 Appraisal · 11 Deeds & title · 12 Mortgages & loans · 13 Loan math & law · 14 Closing · 15 Contracts · 16 Agency & disclosure · 17 Listings · 18 Fair housing · 19 Leases & management · 20 Real estate math · 21 Investment & tax · 22 Practice

1 THE LICENSE EXAM

national and state portions

Two parts

Each state licenses its own agents. The exam has a **national portion** shared by most states (commonly 80 scored questions; this guide) and a **state portion** on that state's license law. Each state sets the passing score (commonly 70%). Read the qualifier (**EXCEPT, NOT**) and answer everything; the course notes no guessing penalty.

⚠ Check your state

- **State law portions vary:** license titles, agency types, forms, fees and deadlines differ.
- Check with your **state's real estate commission** and its current candidate handbook.

About this guide

Not affiliated with or endorsed by any testing company, state real estate commission or trade association. No exam vendor's items are used or imitated; every practice problem is original.

Edition: October 2026. General information, not legal or tax advice; laws and figures change.

2 REAL PROPERTY

land, fixtures and rights

Three layers

Land: the surface, down to the earth's center and up into the air, with natural attachments.

Real estate: land + permanent improvements.

Real property: real estate + the **bundle of rights** (possession, control, enjoyment, exclusion, disposition).

Personal property (chattels) is movable and passes by **bill of sale**.

MEMORY TRICK

Fixture tests (Traditional)

MARIA: **M**ethod of attachment, **A**daptation, **R**elationship of the parties, **I**ntention, **A**greement.

Fixtures and crops

- A **fixture** passes with the deed.
- **Trade fixtures** stay the tenant's if removed before the lease ends; then the landlord's by **accession**.
- **Emblements** (annual crops) are personal; trees are real until **severed**.
- A written agreement overrides the tests; intention is the key legal test.

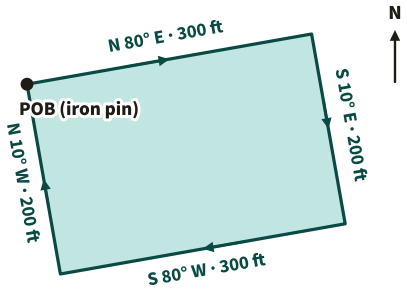
Characteristics of land

Physical	Economic
immobility	scarcity
indestructibility	improvements (modification)
uniqueness (nonhomogeneity)	permanence of investment (fixity)
	area preference (situs)

Land does not depreciate; buildings do.

3 METES AND BOUNDS; LOT AND BLOCK

walking the boundary



Courses and distances run from the POB and close on it.

Metes and bounds

- Starts at a **point of beginning (POB)** and runs by **courses** (bearings) and **distances**.
- A bearing starts with **N or S**, then turns 0° to 90° toward **E or W**.
- **Monuments** (pins, trees, rivers) control over courses; courses over distances.
- It must **return to the POB** to close.

Area of the parcel WORKED

300 ft × 200 ft = **60,000 sq ft**	*a rectangle*
60,000 ÷ 43,560 = **1.38 acres**	*sq ft → acres*

Survey units

Unit	Equals
1 chain	66 ft = 4 rods = 100 links
1 rod	16.5 ft
1 mile	5,280 ft = 80 chains = 320 rods
1 acre	43,560 sq ft = 160 sq rods = 10 sq chains

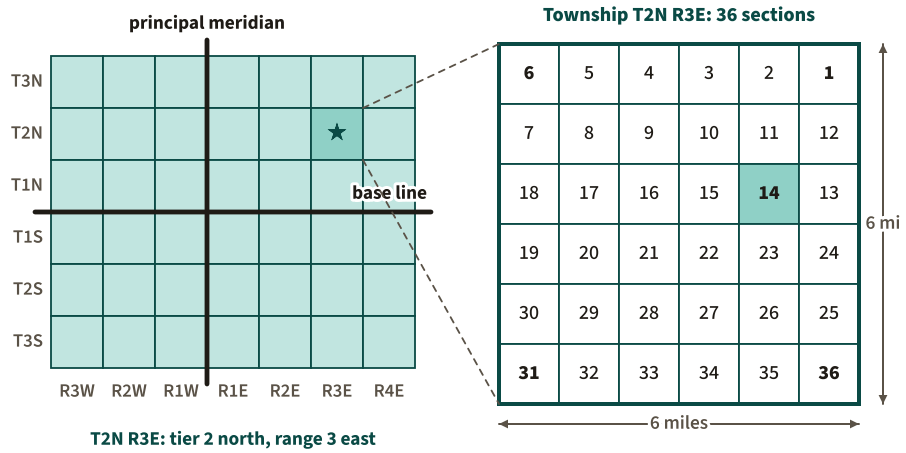
Lot and block

A lot on a **recorded plat**: "Lot 7, Block 3, Maple Ridge Addition, Plat Book 12, page 40." A street address is not a legal description.

The course pairs boundary lines with "Thou shalt not remove thy neighbour's landmark, which they of old time have set in thine inheritance" (Deuteronomy 19:14, KJV).

4 RECTANGULAR SURVEY

townships and sections

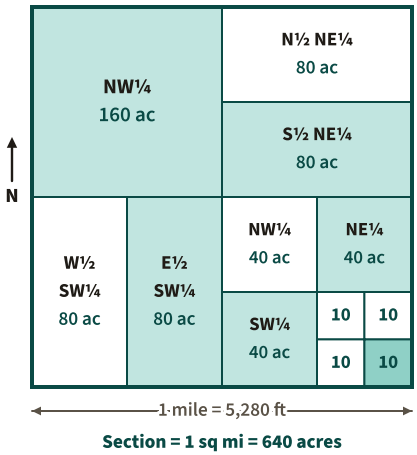


T2N R3E: tier 2 north, range 3 east

Ranges count east or west of the meridian; tiers count north or south of the base line.

The grid

- **Principal meridian:** north–south line. **Base line:** east–west.
- **Range:** a column of townships, E or W. **Tier:** a row, N or S.
- **Township:** 6 miles on a side ("6 miles square"): 36 sq mi, or 36 sections.
- **Section:** 1 sq mi = **640 acres**.
- **Correction lines** every 24 miles; odd pieces are **government lots**.



Section = 1 sq mi = 640 acres

Each fraction in a description is a fraction of 640 acres.

Aliquot acres WORKED

S½ of the NE¼ of Section 14: 640 × ½ × ¼ = **80 acres**

multiply

SE¼ of the SE¼ of the SE¼: 640 × ¼ × ¼ × ¼ = **10 acres** = 435,600 sq ft

NW¼ **and** the N½ of the NE¼: 160 + 80 = **240 acres**

"and" = add

MEMORY TRICK

Compute forward, find backward

Multiply every fraction to get acres; **read backward** from the section to find the parcel.

MEMORY TRICK

Snake through the township

Section **1** sits in the **northeast** corner; the numbers snake back and forth to **36** in the **southeast**.

5 ESTATES AND INTERESTS

ownership and rights

Ownership estates

Freehold estate	Key words and facts
Fee simple absolute	the most complete estate; unlimited, transferable, inheritable
Fee simple determinable	"so long as," "while": ends **automatically** if broken
Fee simple, condition subsequent	"but if," "provided that": grantor must **act** to retake
Life estate	lasts for a life; tenant may sell only the life estate and must not commit **waste**
Pur autre vie	measured by another person's life
Remainder / reversion	future interest of a third party / of the grantor or heirs

Tenant estates (personal property: chattel real)

Leasehold	Ends
Estate for years	on a fixed date, no notice (any length)
Periodic	renews until notice
At will	notice or either party's death
At sufferance	holdover without consent

Lease facts

- A sale does **not** end a lease; the buyer takes subject to it.
- The landlord holds the **leased fee** and the **reversion**.

Water, air and minerals

- **Riparian:** beside a river. **Littoral:** beside a lake or sea. **Prior appropriation** (most western states): first beneficial use.
- **Accretion** gains land (alluvion); **avulsion** is sudden loss, and the boundary generally stays.
- **Air** and **mineral rights** can be sold or leased apart from the surface.

6 FORMS OF OWNERSHIP

one owner or many

Co-ownership

Form	Shares	Survivorship?	Notes
Severalty	one owner	n/a	one person or entity alone
Tenancy in common	may be unequal	no	each may sell, mortgage or will a share
Joint tenancy	equal	yes	four unities; a buyer from one joint tenant becomes a tenant in common
Tenancy by the entirety	equal (spouses)	yes	married couples where allowed; neither alone may convey
Community property	equal (spouses)	by state law	acquired during marriage; gifts, inheritances and prior property stay separate

MEMORY TRICK

Joint tenancy unities (Traditional)

PITT: **P**ossession, **I**nterest, **T**ime, **T**itle.

Shared buildings

- **Condominium:** unit in fee + a share of common elements.
- **Cooperative:** residents hold **stock** and a **proprietary lease**.
- **PUD:** lots in fee; the association owns common areas. **Timeshare:** an estate or a use.

Owning through an entity

- **Trust:** a trustee holds title for a beneficiary.
- **LLC:** members are shielded from its debts.
- **REIT:** owns or finances income property; pays out most taxable income.

7 ENCUMBRANCES AND EASEMENTS

claims that ride along

Liens

Lien	Specific / general	Voluntary?
Mortgage	specific	voluntary
Property tax, special assessment	specific	involuntary
Mechanic's lien	specific	involuntary
Judgment	general	involuntary
Federal income tax lien	general	involuntary

Priority: property taxes and special assessments first, whatever the date; then, generally, the order of recording.

Easements

Appurtenant — benefits the **dominant** parcel, burdens the **servient**; runs with the land

In gross — benefits a person or utility; no dominant tenement

By necessity — access for a landlocked parcel

By prescription — open, notorious, continuous, hostile, uninterrupted for the state's period

Not easements

- **License:** personal, revocable permission; ends at death or sale.
- **Encroachment:** a fence or building over the line; found by a **survey**.
- **Lis pendens:** recorded notice of a pending lawsuit.

Private restrictions

- **Deed restrictions** and **CC&Rs** bind later owners and are enforced by the association or neighbors, usually by **injunction**.
- If a private rule and zoning conflict, the **stricter** one generally governs.

8 GOVERNMENT CONTROLS AND TAXES

public limits on land

MEMORY TRICK

Four government powers (Traditional)

PETE: **P**olice power, **E**minent domain, **T**axation, **E**scheat.

Zoning tools

Variance — relief from a **dimensional** rule for a hardship unique to the land

Conditional use — a **use** the zone allows with approval (a school, a church)

Nonconforming use — lawful before the change; may continue, usually not expand

Spot zoning — one parcel rezoned against the plan; generally illegal

What each does

- **Police power:** zoning and codes; ordinarily no payment.
- **Eminent domain: public use**, **just compensation** (market value), by condemnation.
- **Escheat:** to the state with **no will and no heirs**.

Planning tools

- A **master plan** guides zoning; **setbacks**, **buffer zones** and **density** limits shape each lot.
- **Building codes** set construction standards; a **certificate of occupancy** confirms them.
- **Subdivision** rules govern plats, streets and utilities.

Property tax WORKED

Market $400,000 × 80% ratio = **$320,000** assessed

$320,000 − $50,000 exemption = **$270,000**

25 mills = 0.025: $270,000 × 0.025 = **$6,750**

mills ÷ 1,000

Special assessment: 120 front ft × ($90,000 ÷ 1,200 ft) = **$9,000**

only owners who benefit pay

Unpaid taxes: lien first in line, then a **tax sale**; the owner may **redeem** as state law allows

9 ENVIRONMENTAL ISSUES

hazards and federal rules

Lead-based paint (federal)

- Housing built **before 1978**: sellers and landlords disclose known lead paint and hazards and give the EPA pamphlet.
- Buyers get a **10-day** chance to test (the parties may agree otherwise); tenants do not.

Flood zones

A **special flood hazard area** has a 1% or greater chance of flooding each year (zones starting with **A** or **V**); federally regulated or insured lenders require flood insurance there.

Hazards

Radon	colorless, odorless gas from uranium decay; EPA: fix the home at **4 pCi/L** or more
Asbestos	dangerous when **friable**; encapsulate or remove
UST	tank with at least 10% of its volume underground; leaks foul soil and water
Wetlands	filling usually needs a Section 404 permit

CERCLA (Superfund, 1980)

- Liability is **strict, joint and several, and retroactive**; a current owner can pay for others' waste.
- **Innocent landowner** defense (1986) requires all appropriate inquiry before buying.
- **Phase I** = records, site visit, interviews; **Phase II** samples soil and water.

10 APPRAISAL

three approaches to value

Value basics

- **Value** is worth; **price** was paid; **cost** built it. **Market value:** the most probable price in a fair, open sale.
- Measure honestly: "A false balance is abomination to the LORD: but a just weight is his delight" (Proverbs 11:1, KJV).

MEMORY TRICK

Four elements of value (Traditional)

DUST: Demand, **U**tility, **S**carcity, **T**ransferability.

Cost approach WORKED

Building: 2,000 sq ft × $150 = **$300,000** new
replacement or reproduction

Depreciation: 10 ÷ 50 × 300,000 = **$60,000**
effective age ÷ economic life

Land $90,000 + $240,000 = **$330,000**
land never depreciates

Principles

- **Highest and best use:** legal, possible, feasible, most productive.
- **Conformity:** value peaks near similar homes.
- **Contribution:** worth what it adds, not its cost.
- **Progression / regression:** the lesser home gains / the better one loses.

Also know

- **GRM** = price ÷ **monthly** rent: 270,000 ÷ 1,800 = 150.
- Depreciation: **physical**, **functional**, **external** (always incurable).
- **Reconciliation** weighs, never averages. A higher cap rate means a lower value.
- **FIRREA** (1989): licensed or certified appraisers; **USPAP** standards. A CMA or BPO is not an appraisal.

Sales comparison WORKED

Comp sold $410,000; it has a $15,000 garage the subject lacks; the subject has a $10,000 bath the comp lacks

410,000 − 15,000 + 10,000 = **$405,000**
adjust the comp

MEMORY TRICK

Adjust the comp (Traditional)

CBS: Comp **B**etter, **S**ubtract (comp poorer, add).

Income approach WORKED

10 units × $1,200 × 12 = **$144,000** potential gross

− 5% vacancy ($7,200) + $3,600 other = **$140,400** effective gross

− $56,400 expenses = **$84,000 NOI** (no debt service)

Value = 84,000 ÷ 0.07 = **$1,200,000** *V = I ÷ R*

11 DEEDS AND TRANSFER OF TITLE

how ownership moves

Deeds, most to least protection

Deed	Protection	Deed	Protection
General warranty	most: five covenants (seisin, quiet enjoyment, against encumbrances, further assurance, warranty forever)	**Bargain and sale**	implies title; no express warranties
Special warranty	only defects during the grantor's ownership	**Quitclaim**	none; whatever interest exists; clears clouds

A valid deed needs

- A **competent grantor** (the grantee need only be identifiable).
- Words of conveyance (**granting clause**) and a **legal description**.
- The grantor's **signature**.
- **Delivery and acceptance** in the grantor's lifetime: title passes then.
- **Acknowledgment** is needed to **record**, not to be valid.

Involuntary and by will

- **Adverse possession:** actual, open and notorious, continuous, hostile, exclusive, for the state's period.
- **Testate:** a **devise** is real property; a **bequest**, personal.
- **Intestate:** state descent law; no heirs → escheat.
- Also: foreclosure, eminent domain, partition.

Recording and title

- Recording gives **constructive notice**; so does **possession**.
- Recording acts: **race**, **notice**, **race-notice**.
- **Chain of title** + abstract or title search; **quiet title** suit removes a cloud.
- **Title insurance:** one premium; covers past defects. The lender's policy protects only the lender.
- **Torrens:** a court-issued certificate of title.

12 MORTGAGES AND LOAN TYPES

the debt, security and programs

The security instruments

Instrument	Parties	What it does
Promissory note	maker (borrower), payee (lender)	the promise to pay; personal liability
Mortgage	mortgagor (borrower), mortgagee (lender)	two-party lien on the property
Deed of trust	trustor, trustee, beneficiary (lender)	trustee holds bare legal title until paid

Hypothecation: pledging property without giving up possession. Lien-theory states: the borrower keeps title; title-theory states: the lender or trustee holds it.

Who backs the loan

Loan	Backing	Notes
Conventional	none (lender, private insurer)	conforming meets Fannie/Freddie rules; **jumbo** exceeds the limit
FHA	**insured** by FHA (HUD)	small down payment; MIP up front and yearly
VA	part **guaranteed** by VA	eligible veterans (COE); funding fee; may need no down payment
USDA	**guaranteed** by USDA	eligible rural areas; often no down payment

The government insures or guarantees; private lenders lend. PMI: commonly over 80% LTV; cancel on request at 80% of original value, automatic at 78% (Homeowners Protection Act of 1998).

Key clauses

- **Acceleration:** all due on default. **Alienation:** due on sale. **Defeasance:** lien released when paid.
- A buyer who **assumes** the loan is personally liable; one taking **subject to** it is not.

Special loans

- **HELOC:** a credit line secured by the home. **Wraparound:** a junior loan around an existing one.
- **Purchase-money:** often seller carry-back. **Blanket:** several parcels. **Package:** adds personal property.

Default and foreclosure

- **Judicial:** lawsuit, court-ordered sale. **Nonjudicial:** power of sale, trustee's sale.
- Redemption: **equitable** before the sale; **statutory** after, only where allowed.
- **Deficiency judgment** where state law allows. **Deed in lieu:** lender takes junior liens with it. **Short sale:** less than owed, lender approves.

Secondary market

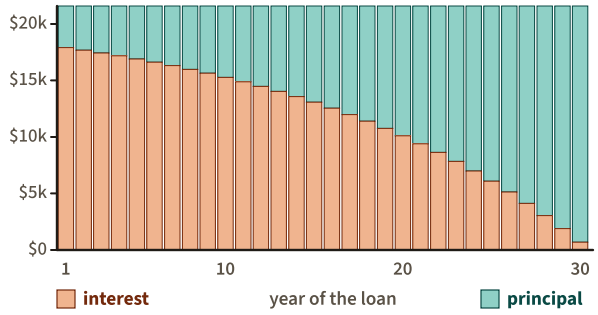
- **Fannie Mae** (1938) and **Freddie Mac** (1970) buy conforming loans and pool them into securities.
- **Ginnie Mae** (1968) guarantees securities of FHA, VA and USDA loans; it buys none.

Payment patterns

- **ARM:** rate = **index + margin**, with initial, periodic and lifetime **caps**.
- **Balloon:** a large last payment. **GPM:** may cause **negative amortization**.
- **Reverse (HECM):** owner 62 or older; repaid at death, sale or move.

13 LOAN MATH AND LENDING LAW

payments, ratios, disclosures



A $300,000 loan at 6% for 30 years: $1,798.65 a month. Year 1 pays $17,899.78 interest and $3,684.04 principal; year 30, $685.41 and $20,898.41.

A $315,000 loan WORKED

Price $360,000, appraisal $350,000: LTV = 315,000 ÷ 350,000 = **90%**; down payment **$45,000**

use the lesser value

2 points = 315,000 × 0.02 = **$6,300** *1 point = 1% of the loan*

Month 1 interest at 6.5%: 315,000 × 0.065 ÷ 12 = **$1,706.25**

P&I (30 years) **$1,991.01**; principal **$284.76**; new balance **$314,715.24**

payment − interest

PITI: 1,991.01 + 4,800 ÷ 12 + 1,440 ÷ 12 = **$2,511.01**; on $9,000 a month that is **27.9%**

28% and 36% are examples, not law

Truth in Lending (1968), Regulation Z

- Disclose the **APR** and finance charge.
- An ad **trigger term** (down payment, payment count or amount, finance charge) requires full disclosure; the APR alone does not.
- **Rescission:** some refinances of a principal dwelling (never a purchase loan) until midnight of the third business day.

RESPA (1974) and TRID (2015)

- **Section 8:** no kickbacks or fees for referrals (broker-to-broker fees are allowed).
- **Loan Estimate:** by the third business day after application.
- **Closing Disclosure:** received at least **three business days** before closing.

Equal Credit Opportunity Act (1974)

- Bars credit discrimination; its bases include **marital status, age** and **public-assistance income**, which the Fair Housing Act does not list.

14 CLOSING AND PRORATIONS

debits, credits, days

Closing statement entries

Item	Buyer	Seller
Purchase price	debit	credit
Earnest money, new loan	credit	n/a
Seller's loan payoff, commission	n/a	debit
Taxes unpaid (in arrears)	credit	debit
Taxes prepaid by the seller	debit	credit
Rent collected in advance, security deposits	credit	debit

Net to seller = seller credits − seller debits. Cash to close = buyer debits − buyer credits.

Proration (taxes in arrears) WORKED

$4,380 a year, closing June 30; seller pays through the day of closing

365-day year: 4,380 ÷ 365 = $12 a day; Jan. 1 to June 30 = 181 days

12 × 181 = **$2,172**: debit seller, credit buyer

360-day year (30-day months): 4,380 ÷ 360 × 180 = **$2,190**

read which year the problem uses

Closing facts

- An **escrow** (closing) agent is neutral and follows written instructions.
- Transfer tax example: $1 per $500 on $350,000 = **$700**; rates and who pays vary by place.
- The settlement agent reports the seller's proceeds to the IRS on **Form 1099-S**.
- Closing Disclosure timing: §13.

15 CONTRACTS

valid, void, voidable

Elements of a valid contract

- **Competent parties** (of age, sound mind).
- **Offer and acceptance** on the same terms (mutual assent).
- **Consideration:** something of legal value.
- **Lawful object.**
- For real estate, **in writing and signed** (Statute of Frauds, from England's 1677 act).

Four status words

Status	Meaning
Valid	all elements; binding and enforceable
Void	no effect from the start (unlawful object)
Voidable	one protected party may cancel (a minor; fraud)
Unenforceable	valid but a court will not enforce (oral sale of land)

Offer and acceptance

- A **counteroffer** kills the original offer.
- An offer may be **revoked** before acceptance is communicated unless paid to stay open.
- A signed purchase agreement gives the buyer **equitable title**; a seller's death does not cancel it.
- Earnest money, recording and notarizing are **not** contract elements.

Contract types

- **Bilateral:** promise for promise (purchase agreement). **Unilateral:** one side bound (option, open listing).
- **Executory:** not yet performed. **Executed:** fully performed.

Special contracts

- **Option:** the optionor is bound; the optionee may buy.
- **Right of first refusal:** match a real offer.
- **Installment (land) contract:** the vendor keeps legal title until paid; the vendee holds equitable title.

Remedies and changes

- **Specific performance:** the court orders the sale; land is unique.
- **Liquidated damages:** an agreed sum, often the earnest money.
- **Rescission:** undo, both restored. In an **assignment** the assignor stays liable; a **novation** releases.

16 AGENCY AND DISCLOSURE

duties owed, facts disclosed

The parties

- **Principal (client):** owed fiduciary duties.
- **Agent:** the **brokerage**, through its licensees.
- **Customer:** owed honesty, fair dealing and disclosure of known material defects.

MEMORY TRICK

Fiduciary duties (Traditional)

OLD CAR: Obedience (lawful orders), **L**oyalty, **D**isclosure, **C**onfidentiality, **A**ccounting, **R**easonable care and skill.

Other relationships

- **Dual agency:** both sides, only with **informed written consent** where allowed.
- **Designated:** one licensee per side. **Transaction broker:** represents neither.

Kinds of agent

- **Universal:** all that can be delegated. **General:** a **property manager**. **Special:** one task, such as a **listing**.

Creating and ending agency

- Created by **express** agreement, **implied** conduct, **ratification** or **estoppel**.
- Who pays does **not** decide who is the client.
- Ends by completion, expiration, agreement, or **death or incapacity** of either.

Truth in selling

- **Puffing** ("gorgeous view") is opinion, generally not actionable.
- **Misrepresentation:** a false fact; **fraud** is intentional.
- Confidentiality never hides a **known material defect**.

Disclosure terms

- **Material fact:** one a reasonable person would weigh in the deal.
- **Latent defect:** hidden; disclose if **known**. **Patent:** visible on inspection.
- **Stigmatized property** (death, crime): rules **vary by state**.
- "**As is**" never excuses hiding a known latent defect.

Who discloses what

- **Seller:** the state's condition form (where required) and lead paint (§9).
- **Licensee:** known material defects to every party; agency status early.
- Licensees dealing for themselves disclose their **license**; ads name the firm (no **blind ads**).

17 LISTING AND BUYER AGREEMENTS

who gets paid, when

Listing agreements

Listing	Broker paid when	Owner sells alone?
Exclusive right to sell	anyone sells during the term	still owes
Exclusive agency	anyone but the owner sells	owes nothing
Open	that broker is the **procuring cause**	owes nothing
Net	keeps all above the seller's net	illegal or discouraged in many states

Listing facts

- A listing is an **employment contract** with the **brokerage**; the firm owns it and all pay flows through the broker.
- A **protection clause** pays the broker if a buyer it introduced buys soon after expiration.

Buyer agreements

Exclusive buyer agency — paid on any purchase in the term

Exclusive-agency buyer — buyer owes nothing if he finds it alone

Open buyer agency — pay only the broker who found it

Antitrust (Sherman Act, 1890)

- **Price fixing:** commissions are always negotiable.
- **Group boycott:** refusing together to deal with a firm.
- **Market allocation:** dividing areas or customers.
- **Tie-in:** "buy this lot only if you list with us."

18 FAIR HOUSING LAW

what the statutes say

The federal laws

Law	Protected classes	Notes
Civil Rights Act of 1866	race	all citizens have the same right "to inherit, purchase, lease, sell, hold, and convey real and personal property"; **no exemptions**; reaches private sales (*Jones v. Alfred H. Mayer Co.*, 1968)
Fair Housing Act (Title VIII, 1968)	race, color, religion, national origin (1968); sex (1974); handicap, familial status (1988)	seven classes; sale, rental, lending, brokerage and ads of dwellings; **HUD** complaints within one year
ADA (1990)	disability	offices open to the public; dwellings fall under the Fair Housing Act

State and local laws may add classes; check your state.

Prohibited acts

- **Steering:** channeling buyers toward or away from areas by protected class, even "helpfully."
- **Blockbusting:** urging owners to sell by citing the entry of a protected class.
- **Redlining:** refusing or worsening loans or insurance in an area because of who lives there.
- No discriminatory **ads**, even by exempt owners.

Exemptions (lost if a broker or a biased ad is used)

- Owner's own **single-family house**, no broker, owning at most **three**.
- Owner-occupied building of **four or fewer** units.
- **Religious groups** and **private clubs**, within limits.
- **Older persons:** all 62 or older, or 80% of units with someone 55 or older.

Key terms

- **Familial status:** children under 18 with a parent or custodian, including pregnancy.
- **Reasonable modification:** a ramp or grab bar; resident pays.
- **Reasonable accommodation:** a rule change, such as an **assistance animal**.
- **Design rules:** four or more units, first occupied after March 13, 1991.

19 LEASES AND PROPERTY MANAGEMENT

landlord, tenant, manager

Lease types

- **Gross:** fixed rent; landlord pays taxes, insurance, upkeep.
- **Net:** tenant also pays taxes (single), + insurance (double), + maintenance (triple).
- **Percentage:** base + a percent of sales over a **breakpoint**.
- **Graduated / index:** set step-ups / tied to an index.
- **Ground lease:** land only. **Sale-leaseback:** sell, then rent back.

Percentage lease WORKED

$3,000 a month + 5% of annual sales over $400,000; sales $520,000

36,000 + 0.05 × 120,000 = **$42,000** a year

percent only above the breakpoint

Property management

- The manager is usually a **general agent** under a written management agreement.
- Fee on rents **collected**: 8% of $96,000 = **$7,680**.
- Maintenance: **preventive** (before), **corrective** (after), **construction** (changes or additions).

Tenant rights

- **Quiet enjoyment** of possession; **habitability** in most states.
- **Assignment:** the whole lease. **Sublease:** the subtenant pays the tenant, who stays liable.
- **Constructive eviction:** the tenant must move out within a reasonable time.
- Evict only through the courts.

MEMORY TRICK

Four risk choices (Traditional)

ACTS: avoid, control, transfer (buy insurance) or retain (a deductible).

20 REAL ESTATE MATH

worked examples

Part = Whole × Rate

Part = Whole × Rate

Percents WORKED

Bought $250,000, sold $300,000: 50,000 ÷ 250,000 = **20%** gain

divide by the old value

Sold for $276,000 at a 15% profit: cost = 276,000 ÷ 1.15 = **$240,000**

NOI $84,000 on a $1,050,000 price: cap rate = **8%**

R = I ÷ V

MEMORY TRICK

Cover the unknown (Traditional)

T-bar: Part on top; Whole × Rate below. Cover what you want: Part = W × R; Whole = P ÷ R; Rate = P ÷ W.

Commission split WORKED

$425,000 × 6% = **$25,500** *total*

Listing firm's 50% = **$12,750**

Agent's 70% of the firm share = **$8,925**

from the firm share

Price for a target net WORKED

Seller wants $380,000 net, has $6,000 in costs, pays 6%

(380,000 + 6,000) ÷ (1 − 0.06) = **$410,638.30**

divide; don't add 6%

Area and volume WORKED

Lot 125 ft (front) × 210 ft = **26,250 sq ft**; 26,250 ÷ 43,560 = **0.60 acre**

Triangle: ½ × 150 × 80 = **6,000 sq ft**

Slab 60 ft × 12 ft × 4 in: 60 × 12 × 4/12 = 240 cu ft; 240 ÷ 27 = **8.89 cu yd**

inches → feet

21 INVESTMENT AND TAX BASICS

depreciation, gain, exchanges

Cost recovery WORKED

Building $330,000 (never the land) ÷ 27.5 years = **$12,000** a year

residential rental

Nonresidential property: **39** years

no depreciation on your own home

Section 121 (main home)

- Owned and used as the principal residence **2 of the 5 years** before the sale.
- Exclude up to **$250,000** of gain ($500,000 for married couples filing jointly).

Gain on a home sale WORKED

Basis $250,000 + $30,000 improvements = **$280,000** adjusted basis

$420,000 price − $25,000 selling costs = **$395,000** amount realized

Gain = **$115,000**; under the $250,000 exclusion, so taxable gain **$0**

Section 121

Cash flow

Cash flow = NOI − debt service. Explain concepts, but send tax questions to a CPA or tax attorney.

Section 1031 exchange

- Trade investment or business real property for like-kind real property.
- Identify within **45 days**; finish within **180 days**.
- Tax is **deferred**, not erased; **boot** is taxable now.

22 PRACTICE PROBLEMS

original, with answers

Sixteen original problems

Problem	Answer	Problem	Answer
A bakery tenant bolts display shelves to the wall. Whose are they when the lease ends?	The tenant's (trade fixtures) if removed **before** the lease ends; after that, the landlord's.	What do 2 points cost on a $250,000 loan?	250,000 × 0.02 = **$5,000**
How many acres are in the N½ of the SW¼ of a section?	640 × ½ × ¼ = **80 acres**	A 90 ft × 140 ft lot sells for $3.50 a square foot. The price?	12,600 sq ft × 3.50 = **$44,100**
Price $480,000, appraisal $475,000, loan $384,000. What is the LTV?	384,000 ÷ 475,000 = **80.8%** (use the lesser value)	$390,000 sale, 5.5% commission split 50/50 between firms; the agent keeps 60% of her firm's share. Her pay?	21,450 × 0.5 × 0.6 = **$6,435**
During an exclusive-agency listing, the owner finds a buyer herself. Is a commission owed?	**No.** Only an exclusive-right-to-sell listing pays then.	A house built in 1975 is sold. What does federal lead law require?	Disclose known lead paint, give the EPA pamphlet and offer a **10-day** test period
Taxes of $3,650 are paid in arrears. Closing is day 73 of a 365-day year; the seller pays that day. The entry?	3,650 ÷ 365 × 73 = **$730**: debit seller, credit buyer	Which co-ownership needs the four unities and carries survivorship?	**Joint tenancy**
NOI is $66,000 and the cap rate is 7.5%. Estimate the value.	66,000 ÷ 0.075 = **$880,000**	What is one month's interest on a $200,000 balance at 6%?	200,000 × 0.06 ÷ 12 = **$1,000**
A seller's agent tells a buyer, "My seller will take less." Which duty is broken?	**Confidentiality** (and loyalty) owed to the seller	Under a deed of trust, who holds legal title until the loan is paid?	The **trustee** (bare legal title, for the lender)
A duplex owner living in one unit lists the other with a broker and refuses families with children. Exempt?	**No.** Using a broker ends the exemption.	Which deed carries no warranties at all?	The **quitclaim** deed

All problems are original to School Launch; none comes from any exam vendor.