Grade 3 Math: Printables Pack

Grade 3 Math · Contents

1. Multiplication table
2. Multiplication flashcards
3. Timed drills (× and ÷) with keys
4. Fact-mastery tracker
5. Place-value mat
6. Fraction strips
7. Blank clocks
8. Paper rulers
9. Graph paper
10. Record sheet
11. Unit checks and exams with keys

Print only what you need. The lesson worksheets and their keys are separate PDFs linked from each lesson.

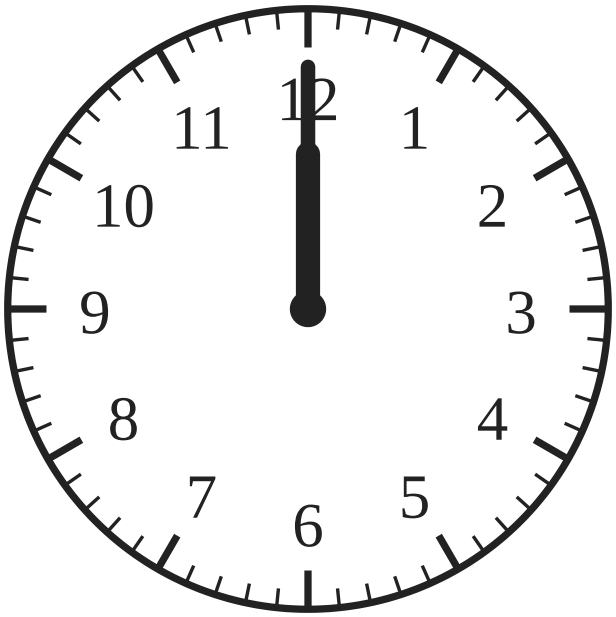
Place-Value Mat

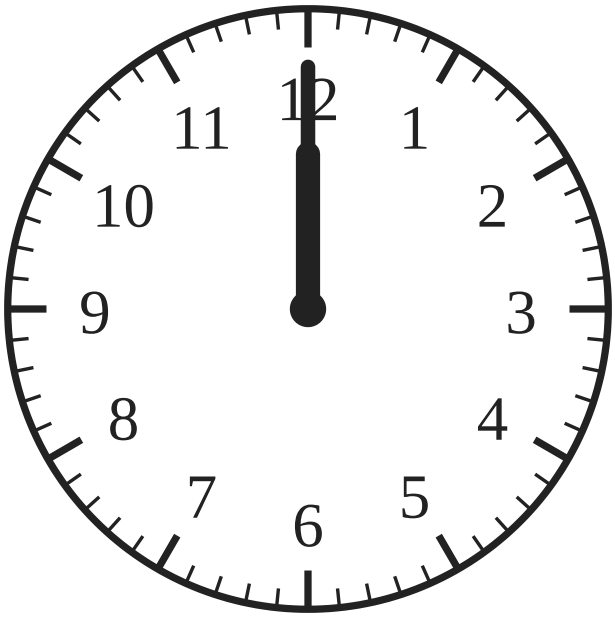
Grade 3 Math · Put blocks or digit cards in the right column.

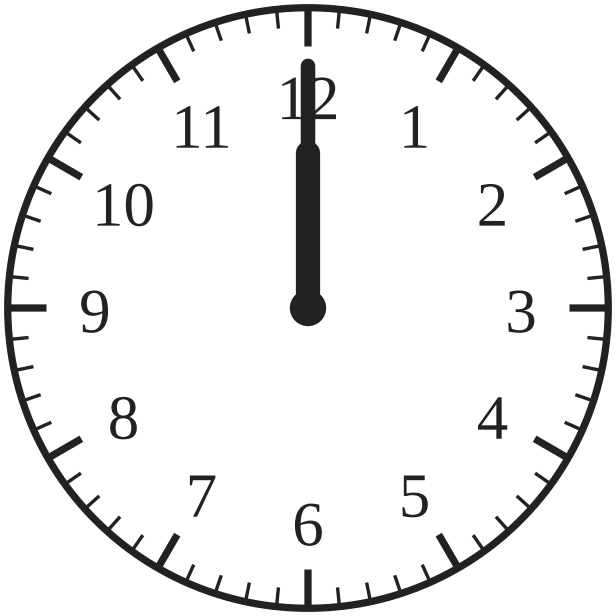
Thousands	Hundreds	Tens	Ones

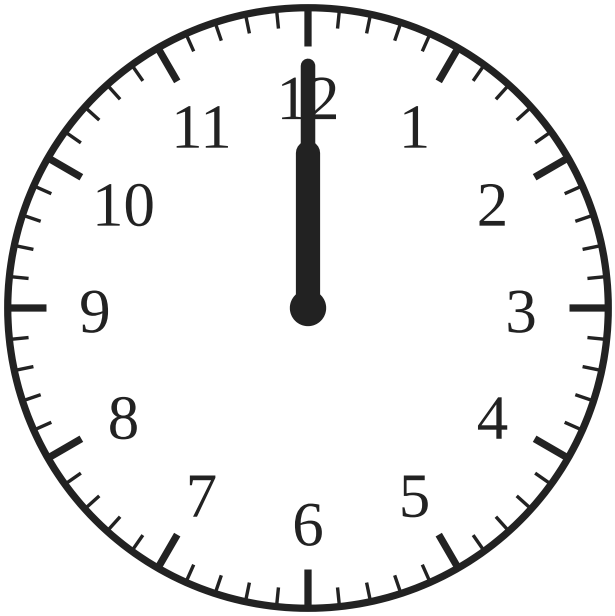
Blank Clocks

Grade 3 Math · Draw the hands for a time your parent says. Cut out one face and add paper hands with a brad.



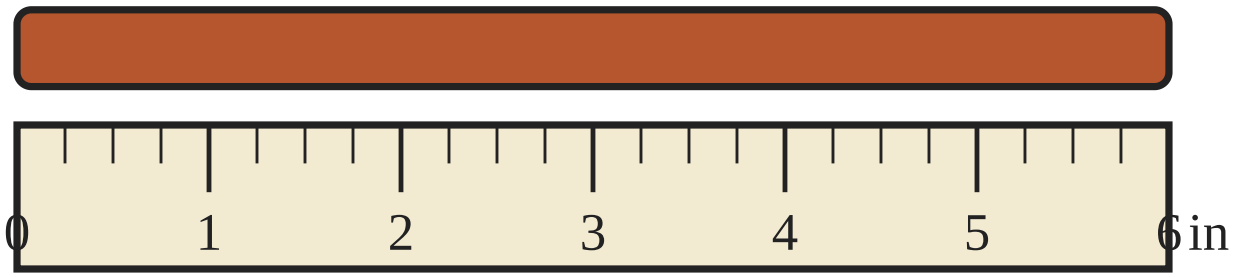


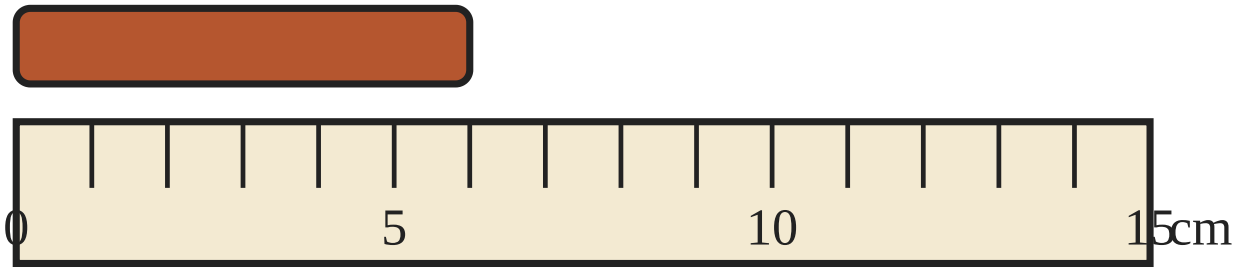


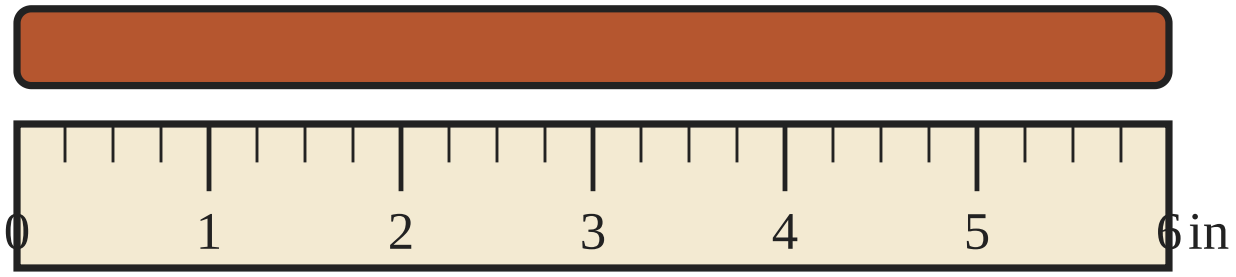


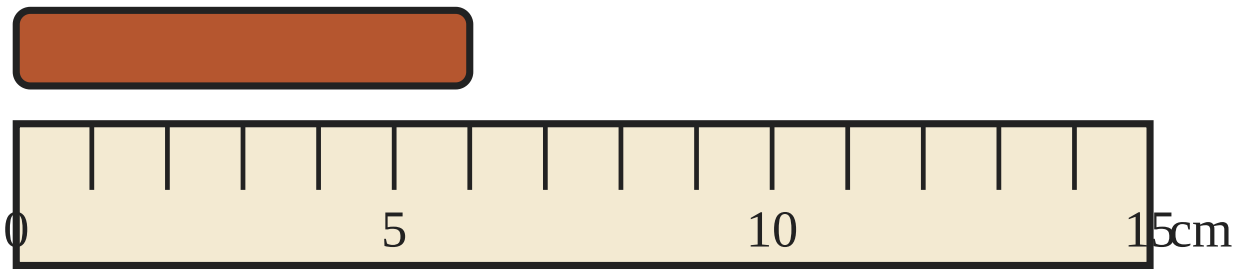
Paper Rulers

Grade 3 Math · Print at 100% (actual size, not “fit to page”) and check one inch against a real ruler before use.



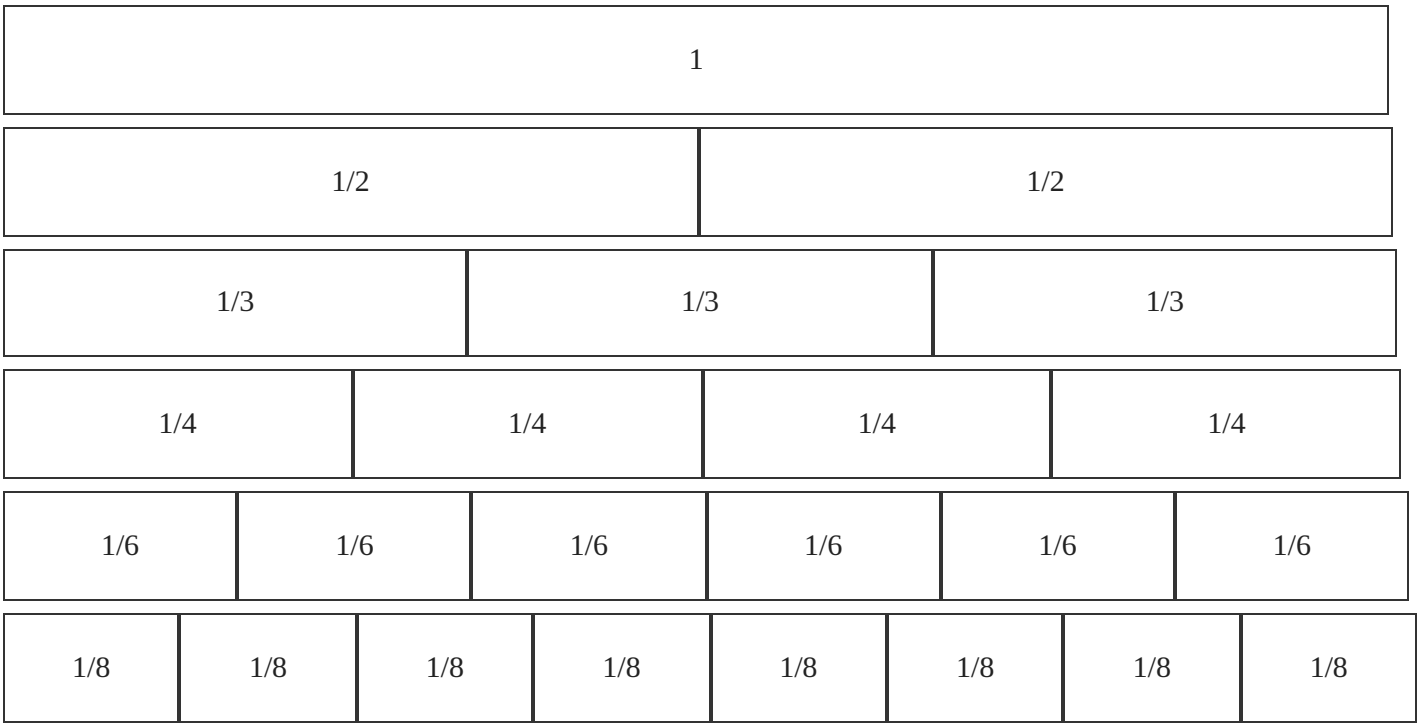






Fraction Strips

Grade 3 Math · Cut out each strip. Compare pieces to find equivalent fractions.



Multiplication Table to 10 × 10

Grade 3 Math · For reference while learning. Facts should become instant; then put this away.

×	1	2	3	4	5	6	7	8	9	10
1	1	2	3	4	5	6	7	8	9	10
2	2	4	6	8	10	12	14	16	18	20
3	3	6	9	12	15	18	21	24	27	30
4	4	8	12	16	20	24	28	32	36	40
5	5	10	15	20	25	30	35	40	45	50
6	6	12	18	24	30	36	42	48	54	60
7	7	14	21	28	35	42	49	56	63	70
8	8	16	24	32	40	48	56	64	72	80
9	9	18	27	36	45	54	63	72	81	90
10	10	20	30	40	50	60	70	80	90	100

Flashcards (× facts)

Grade 3 Math · Cut on the dashed lines. Print on cardstock if you can.

2 × 2	2 × 3	2 × 4	2 × 5
2 × 6	2 × 7	2 × 8	2 × 9
5 × 2	5 × 3	5 × 4	5 × 5
5 × 6	5 × 7	5 × 8	5 × 9
10 × 2	10 × 3	10 × 4	10 × 5

Flashcards (× facts)

Grade 3 Math · Cut on the dashed lines. Print on cardstock if you can.

10 × 6	10 × 7	10 × 8	10 × 9
3 × 2	3 × 3	3 × 4	3 × 5
3 × 6	3 × 7	3 × 8	3 × 9
4 × 2	4 × 3	4 × 4	4 × 5
4 × 6	4 × 7	4 × 8	4 × 9

Flashcards (× facts)

Grade 3 Math · Cut on the dashed lines. Print on cardstock if you can.

6 × 2	6 × 3	6 × 4	6 × 5
6 × 6	6 × 7	6 × 8	6 × 9
9 × 2	9 × 3	9 × 4	9 × 5
9 × 6	9 × 7	9 × 8	9 × 9
8 × 2	8 × 3	8 × 4	8 × 5

Timed Drill: Multiplication Facts

Grade 3 Math · One minute (or as long as it takes; record the time). Score ____ / 60

2 × 5 = ____	7 × 7 = ____	9 × 4 = ____	10 × 2 = ____
7 × 6 = ____	6 × 9 = ____	5 × 3 = ____	5 × 6 = ____
5 × 3 = ____	8 × 6 = ____	7 × 8 = ____	3 × 10 = ____
5 × 8 = ____	6 × 3 = ____	6 × 5 = ____	7 × 6 = ____
5 × 5 = ____	7 × 8 = ____	6 × 7 = ____	6 × 2 = ____
5 × 9 = ____	3 × 2 = ____	7 × 6 = ____	8 × 5 = ____
3 × 5 = ____	9 × 10 = ____	3 × 5 = ____	4 × 9 = ____
10 × 3 = ____	4 × 6 = ____	6 × 5 = ____	3 × 3 = ____
4 × 8 = ____	2 × 9 = ____	7 × 6 = ____	5 × 8 = ____
2 × 2 = ____	6 × 2 = ____	5 × 10 = ____	10 × 4 = ____
10 × 9 = ____	4 × 5 = ____	10 × 3 = ____	4 × 3 = ____
3 × 10 = ____	6 × 2 = ____	8 × 3 = ____	3 × 2 = ____
6 × 7 = ____	2 × 7 = ____	2 × 3 = ____	3 × 9 = ____
5 × 5 = ____	10 × 7 = ____	3 × 4 = ____	2 × 2 = ____
7 × 6 = ____	10 × 3 = ____	3 × 8 = ____	5 × 3 = ____

Timed Drill Key: Multiplication Facts

Grade 3 Math · For the parent. Every answer is computer-checked.

2 × 5 = **10**	7 × 7 = **49**	9 × 4 = **36**	10 × 2 = **20**
7 × 6 = **42**	6 × 9 = **54**	5 × 3 = **15**	5 × 6 = **30**
5 × 3 = **15**	8 × 6 = **48**	7 × 8 = **56**	3 × 10 = **30**
5 × 8 = **40**	6 × 3 = **18**	6 × 5 = **30**	7 × 6 = **42**
5 × 5 = **25**	7 × 8 = **56**	6 × 7 = **42**	6 × 2 = **12**
5 × 9 = **45**	3 × 2 = **6**	7 × 6 = **42**	8 × 5 = **40**
3 × 5 = **15**	9 × 10 = **90**	3 × 5 = **15**	4 × 9 = **36**
10 × 3 = **30**	4 × 6 = **24**	6 × 5 = **30**	3 × 3 = **9**
4 × 8 = **32**	2 × 9 = **18**	7 × 6 = **42**	5 × 8 = **40**
2 × 2 = **4**	6 × 2 = **12**	5 × 10 = **50**	10 × 4 = **40**
10 × 9 = **90**	4 × 5 = **20**	10 × 3 = **30**	4 × 3 = **12**
3 × 10 = **30**	6 × 2 = **12**	8 × 3 = **24**	3 × 2 = **6**
6 × 7 = **42**	2 × 7 = **14**	2 × 3 = **6**	3 × 9 = **27**
5 × 5 = **25**	10 × 7 = **70**	3 × 4 = **12**	2 × 2 = **4**
7 × 6 = **42**	10 × 3 = **30**	3 × 8 = **24**	5 × 3 = **15**

Timed Drill: Division Facts

Grade 3 Math · One minute (or as long as it takes; record the time). Score ____ / 60

72 ÷ 9 = ____	54 ÷ 9 = ____	42 ÷ 7 = ____	4 ÷ 2 = ____
42 ÷ 6 = ____	48 ÷ 8 = ____	14 ÷ 7 = ____	32 ÷ 8 = ____
12 ÷ 6 = ____	63 ÷ 9 = ____	12 ÷ 2 = ____	15 ÷ 5 = ____
14 ÷ 2 = ____	50 ÷ 5 = ____	20 ÷ 4 = ____	63 ÷ 7 = ____
28 ÷ 7 = ____	14 ÷ 7 = ____	16 ÷ 2 = ____	35 ÷ 5 = ____
8 ÷ 2 = ____	20 ÷ 5 = ____	12 ÷ 3 = ____	18 ÷ 9 = ____
60 ÷ 6 = ____	20 ÷ 10 = ____	8 ÷ 2 = ____	32 ÷ 8 = ____
70 ÷ 10 = ____	21 ÷ 7 = ____	12 ÷ 2 = ____	72 ÷ 9 = ____
12 ÷ 3 = ____	4 ÷ 2 = ____	28 ÷ 7 = ____	90 ÷ 10 = ____
25 ÷ 5 = ____	30 ÷ 6 = ____	72 ÷ 8 = ____	15 ÷ 3 = ____
70 ÷ 7 = ____	45 ÷ 9 = ____	27 ÷ 3 = ____	24 ÷ 6 = ____
70 ÷ 10 = ____	60 ÷ 10 = ____	12 ÷ 3 = ____	70 ÷ 7 = ____
24 ÷ 8 = ____	70 ÷ 7 = ____	80 ÷ 8 = ____	100 ÷ 10 = ____
24 ÷ 4 = ____	28 ÷ 7 = ____	54 ÷ 6 = ____	4 ÷ 2 = ____
24 ÷ 3 = ____	45 ÷ 9 = ____	16 ÷ 8 = ____	24 ÷ 4 = ____

Timed Drill Key: Division Facts

Grade 3 Math · For the parent. Every answer is computer-checked.

72 ÷ 9 = **8**
42 ÷ 6 = **7**
12 ÷ 6 = **2**
14 ÷ 2 = **7**
28 ÷ 7 = **4**
8 ÷ 2 = **4**
60 ÷ 6 = **10**
70 ÷ 10 = **7**
12 ÷ 3 = **4**
25 ÷ 5 = **5**
70 ÷ 7 = **10**
70 ÷ 10 = **7**
24 ÷ 8 = **3**
24 ÷ 4 = **6**
24 ÷ 3 = **8**

54 ÷ 9 = **6**
48 ÷ 8 = **6**
63 ÷ 9 = **7**
50 ÷ 5 = **10**
14 ÷ 7 = **2**
20 ÷ 5 = **4**
20 ÷ 10 = **2**
21 ÷ 7 = **3**
4 ÷ 2 = **2**
30 ÷ 6 = **5**
45 ÷ 9 = **5**
60 ÷ 10 = **6**
70 ÷ 7 = **10**
28 ÷ 7 = **4**
45 ÷ 9 = **5**

42 ÷ 7 = **6**
14 ÷ 7 = **2**
12 ÷ 2 = **6**
20 ÷ 4 = **5**
16 ÷ 2 = **8**
12 ÷ 3 = **4**
8 ÷ 2 = **4**
12 ÷ 2 = **6**
28 ÷ 7 = **4**
72 ÷ 8 = **9**
27 ÷ 3 = **9**
12 ÷ 3 = **4**
80 ÷ 8 = **10**
54 ÷ 6 = **9**
16 ÷ 8 = **2**

4 ÷ 2 = **2**
32 ÷ 8 = **4**
15 ÷ 5 = **3**
63 ÷ 7 = **9**
35 ÷ 5 = **7**
18 ÷ 9 = **2**
32 ÷ 8 = **4**
72 ÷ 9 = **8**
90 ÷ 10 = **9**
15 ÷ 3 = **5**
24 ÷ 6 = **4**
70 ÷ 7 = **10**
100 ÷ 10 = **10**
4 ÷ 2 = **2**
24 ÷ 4 = **6**

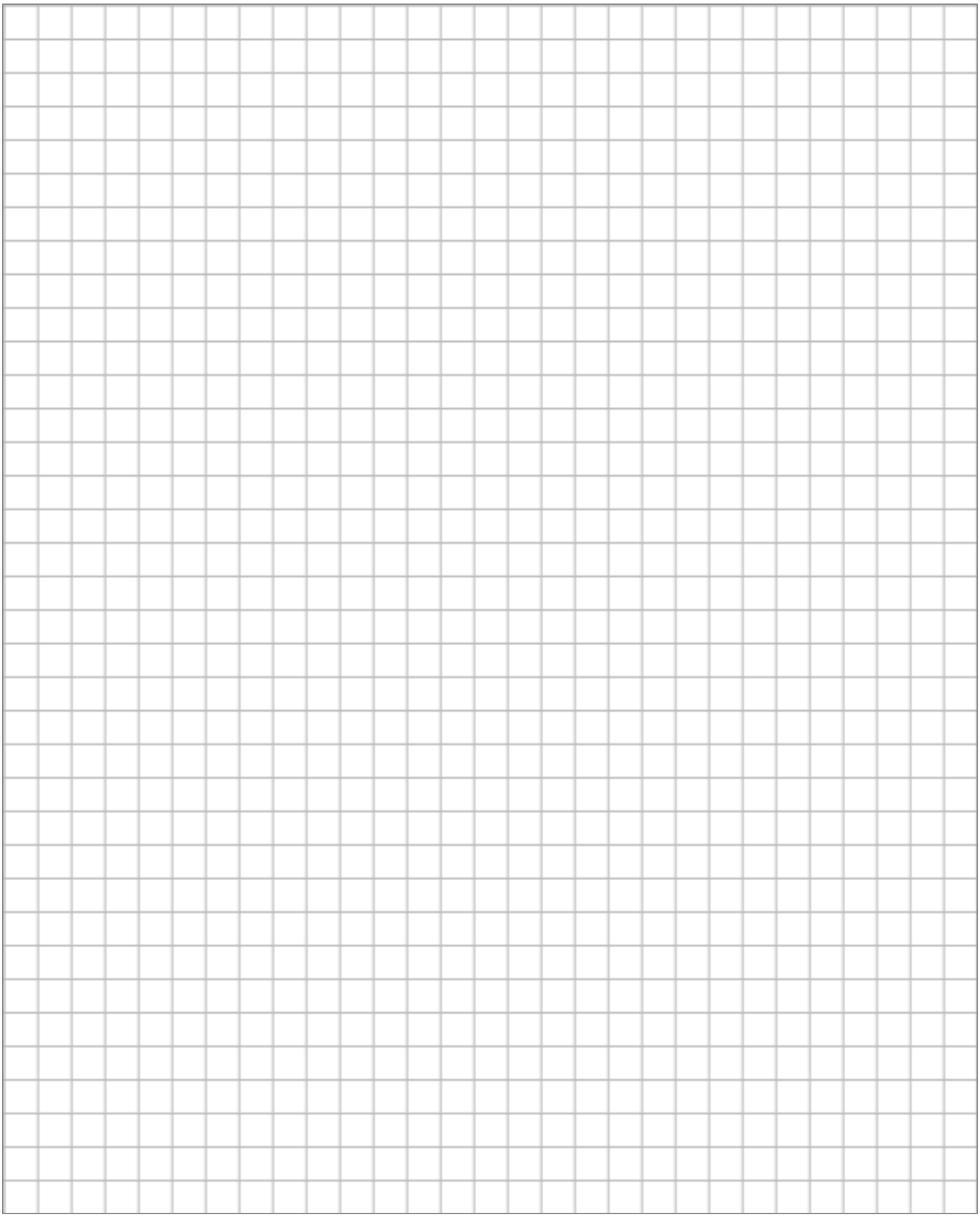
Fact-Mastery Tracker

Grade 3 Math · Each Friday write the score (or a check when every fact is answered in about 3 seconds).

Facts	Wk 1	Wk 2	Wk 3	Wk 4	Wk 5	Wk 6	Wk 7	Wk 8
×2, ×5, ×10								
×3, ×4								
×6								
×9								
×7, ×8								
÷ facts								
Mixed × and ÷								

Graph Paper

Grade 3 Math · One digit per square keeps columns lined up.



Record Sheet

Grade 3 Math · One line per lesson: date finished, Worksheet A score, Worksheet B score, notes.

Lesson	Date	A	B	Notes
1.1 Numbers to 10,000				
1.2 Rounding to 10 and 100				
1.3 Estimating Sums				
1.4 Roman Numerals				
2.1 Adding with Regrouping				
2.2 Subtracting with Regrouping				
2.3 Mental Math Strategies				
2.4 Two-Step Word Problems				
3.1 Equal Groups and Arrays				
3.2 Facts of 2, 5, 10				
3.3 Facts of 3 and 4				
3.4 Commutative Property				
4.1 Sharing and Grouping				
4.2 Multiplication and Division Families				
4.3 Dividing with 2, 5, 10				
4.4 Dividing with 3 and 4				
5.1 Facts of 6				
5.2 Facts of 9				
5.3 Facts of 7 and 8				
5.4 Distributive Property as a Strategy				
6.1 Unit Fractions and Fractions of a Set				
6.2 Fractions on a Number Line				
6.3 Equivalent Fractions				
6.4 Comparing Fractions				
7.1 Area by Tiling				
7.2 Area = Length × Width				
7.3 Perimeter				
7.4 Area and Perimeter Word Problems				
8.1 Time to the Minute and Elapsed Time				
8.2 Grams, Kilograms, Liters				
8.3 Right Angles and Quadrilaterals				
8.4 Scaled Bar Graphs				
9.1 Facts of 11 and 12				
9.2 Multiplication Word Problems				
9.3 Fractions Review				
9.4 End-of-Year Check				

Placement Check

School Launch · Grade 3 Math · Grade 2 skills: regrouping, place value to 1,000, money, time and arrays · Worksheet A

No calculator

Name _____ Date _____ Score _____ / 10

Show your work under each problem, one step per line, and check your answer. Word problems: name the unknown, draw a bar model if it helps, write the equation, solve, and answer in a sentence with units.

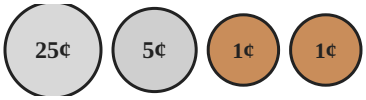
1. 115 + 213 = ___ MEDIUM

2. 875 − 165 = ___ MEDIUM

3. Write 413 in expanded form. MEDIUM

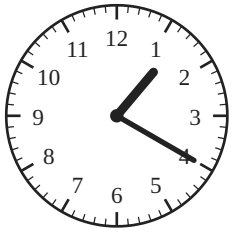
4. Write <, > or = : 272 ___ 227 MEDIUM

5. How much money is shown? MEDIUM

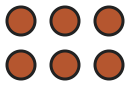


6. A loaf costs 53¢. You pay with $1.00. How much change do you get? MEDIUM

7. What time does the clock show? MEDIUM



8. Write a multiplication fact for the array. How many in all? MEDIUM



9. 8 + 9 = ___ MEDIUM

10. A carpenter cut 68 boards on Monday and 27 boards on Tuesday. How many boards did he cut? HARD



Answer Key · Placement Check

School Launch · Grade 3 Math · Grade 2 skills: regrouping, place value to 1,000, money, time and arrays · Worksheet A · for the parent

Key

1. 328

1. Ones: 5 + 3 = 8. Write 8.
2. Tens: 1 + 1 = 2. Write 2.
3. Hundreds: 1 + 2 = 3. Write 3.
4. 115 + 213 = 328

115 + 213 = ___

2. 710

1. Ones: 5 − 5 = 0
2. Tens: 7 − 6 = 1
3. Hundreds: 8 − 1 = 7
4. Check: 710 + 165 = 875

875 − 165 = ___

3. 400 + 10 + 3

1. Write each digit times its place value: 400 + 10 + 3
2. Check: 400 + 10 + 3 = 413

Write 413 in expanded form.

4. 272 > 227

1. Compare from the left. The first place that differs is the tens: 7 and 2.
2. 272 > 227

Write <, > or = : 272 ___ 227

5. 32¢

1. Start with the coin worth the most and count on: 25, 30, 31, 32.
2. Total: 32¢

How much money is shown?

6. 47¢

1. Subtract in cents: 100 − 53 = 47
2. Check: 53 + 47 = 100
3. Change: 47¢

A loaf costs 53¢. You pay with $1.00. How much change do you get?

7. 1:20

1. The short hand is past the 1, so the hour is 1.
2. The long hand points to the 4. Count by fives: 4 × 5 = 20 minutes.
3. The time is 1:20.

What time does the clock show?

8. 2 × 3 = 6

1. There are 2 rows of 3.
2. 3 + 3 = 6
3. 2 × 3 = 6

Write a multiplication fact for the array. How many in all?

9. 17

1. Make ten: 9 needs 1 more to make 10.
2. Split 8 into 1 and 7.
3. 9 + 1 = 10
4. 10 + 7 = 17

8 + 9 = ___

10. 95 boards. He cut 95 boards.

1. Unknown: the total.
2. Bar model: two parts, 68 and 27; the whole is unknown.
3. Equation: 68 + 27 = ?
4. 68 + 27 = 95
5. Answer: He cut 95 boards.

A carpenter cut 68 boards on Monday and 27 boards on Tuesday. How many boards did he cut?

Unit 1 Test: Place Value and Rounding

School Launch · Grade 3 Math · Unit 1: Place Value and Rounding · Worksheet A

No calculator

Name _____ Date _____ Score _____ / 12

Show your work under each problem, one step per line, and check your answer. Word problems: name the unknown, draw a bar model if it helps, write the equation, solve, and answer in a sentence with units.

1. Write 4,661 in expanded form. MEDIUM

2. Write the number in digits: *one thousand four hundred thirty-eight* HARD

3. Write 6,445 in expanded form. MEDIUM

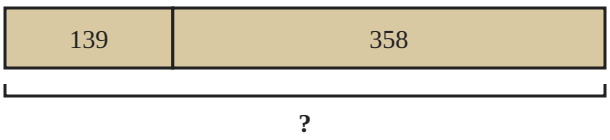
4. Round 249 to the nearest 10. MEDIUM

5. Round 598 to the nearest 100. HARD

6. Round 503 to the nearest 10. MEDIUM

7. 161 + 198 = ___ MEDIUM

8. Farmer Eli gathered 139 eggs in the morning and 358 eggs in the evening. How many eggs did he gather in all? HARD



9. 410 + 156 = ___ MEDIUM

10. Write 41 in Roman numerals. MEDIUM

11. What number is the Roman numeral XCI? HARD

12. Write 32 in Roman numerals. MEDIUM

Answer Key · Unit 1 Test: Place Value and Rounding

School Launch · Grade 3 Math · Unit 1: Place Value and Rounding · Worksheet A · for the parent

Key

1. 4,000 + 600 + 60 + 1

1. Write each digit times its place value: 4,000 + 600 + 60 + 1
2. Check: 4,000 + 600 + 60 + 1 = 4,661

Write 4,661 in expanded form.

2. 1,438

1. Read it in groups: one thousand four hundred thirty-eight → 1,438

Write the number in digits: *one thousand four hundred thirty-eight*

3. 6,000 + 400 + 40 + 5

1. Write each digit times its place value: 6,000 + 400 + 40 + 5
2. Check: 6,000 + 400 + 40 + 5 = 6,445

Write 6,445 in expanded form.

4. 250

1. 249 is between 240 and 250.
2. Look at the ones digit: 9. 5 or more, so round up.
3. 249 rounds to 250.

Round 249 to the nearest 10.

5. 600

1. 598 is between 500 and 600.
2. Look at the tens digit: 9. 5 or more, so round up.
3. 598 rounds to 600.

Round 598 to the nearest 100.

6. 500

1. 503 is between 500 and 510.
2. Look at the ones digit: 3. Less than 5, so round down.
3. 503 rounds to 500.

Round 503 to the nearest 10.

7. 359

1. Ones: 1 + 8 = 9. Write 9.
2. Tens: 6 + 9 = 15. Write 5 and regroup 1 to the hundreds.
3. Hundreds: 1 + 1 + 1 = 3. Write 3.
4. 161 + 198 = 359

161 + 198 = ___

8. 497 eggs. Eli gathered 497 eggs in all.

1. Unknown: the total.
2. Bar model: two parts, 139 and 358; the whole is unknown.
3. Equation: 139 + 358 = ?
4. 139 + 358 = 497
5. Answer: Eli gathered 497 eggs in all.

Farmer Eli gathered 139 eggs in the morning and 358 eggs in the evening. How many eggs did he gather in all?

9. 566

1. Ones: 0 + 6 = 6. Write 6.
2. Tens: 1 + 5 = 6. Write 6.
3. Hundreds: 4 + 1 = 5. Write 5.
4. 410 + 156 = 566

410 + 156 = ___

10. XLI

1. Break 41 into parts: 40 + 1 = 41
2. Write each part: 40 = XL, 1 = I
3. 41 = XLI

Write 41 in Roman numerals.

11. 91

1. Read the parts: XC = 90, I = 1
2. 90 + 1 = 91

What number is the Roman numeral XCI?

12. XXXII

1. Break 32 into parts: 10 + 10 + 10 + 1 + 1 = 32
2. Write each part: 10 = X, 10 = X, 10 = X, 1 = I, 1 = I
3. 32 = XXXII

Write 32 in Roman numerals.

Unit 2 Test: Adding and Subtracting Larger Numbers

School Launch · Grade 3 Math · Unit 2: Adding and Subtracting Larger Numbers · Worksheet A

No calculator

Name _____ Date _____ Score _____ / 12

Show your work under each problem, one step per line, and check your answer. Word problems: name the unknown, draw a bar model if it helps, write the equation, solve, and answer in a sentence with units.

1. 1,648 + 4,052 = ___ MEDIUM

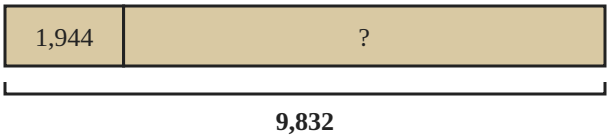
2. Noah led 2,733 sheep into the ark, then 4,946 more. How many sheep went in? HARD



3. 1,665 + 3,758 = ___ MEDIUM

4. 9,907 − 4,735 = ___ MEDIUM

5. The orchard had 9,832 apples on a tree. The children picked 1,944. How many apples are left on the tree? HARD



6. 7,905 − 5,263 = ___ MEDIUM

7. 36 + 166 = ___ MEDIUM

8. 872 − 95 = ___ HARD

9. 99 + 186 = ___ MEDIUM

10. The miller had 42 sacks. A farmer brought 52 more. Then 37 sacks were sold. How many sacks does the miller have now? HARD

11. The miller had 386 sacks. A farmer brought 182 more. Then 276 sacks were sold. How many sacks does the miller have now? HARD

12. The miller had 67 sacks. A farmer brought 47 more. Then 75 sacks were sold. How many sacks does the miller have now? HARD

Answer Key · Unit 2 Test: Adding and Subtracting Larger Numbers

School Launch · Grade 3 Math · Unit 2: Adding and Subtracting Larger Numbers · Worksheet A · for the parent

Key

1. 5,700

1. Ones: 8 + 2 = 10. Write 0 and regroup 1 to the tens.
2. Tens: 1 + 4 + 5 = 10. Write 0 and regroup 1 to the hundreds.
3. Hundreds: 1 + 6 + 0 = 7. Write 7.
4. Thousands: 1 + 4 = 5. Write 5.
5. 1,648 + 4,052 = 5,700

1,648 + 4,052 = ___

2. 7,679 sheep. 7,679 sheep went into the ark.

1. Unknown: the total.
2. Bar model: two parts, 2,733 and 4,946; the whole is unknown.
3. Equation: 2,733 + 4,946 = ?
4. 2,733 + 4,946 = 7,679
5. Answer: 7,679 sheep went into the ark.

Noah led 2,733 sheep into the ark, then 4,946 more. How many sheep went in?

3. 5,423

1. Ones: 5 + 8 = 13. Write 3 and regroup 1 to the tens.
2. Tens: 1 + 6 + 5 = 12. Write 2 and regroup 1 to the hundreds.
3. Hundreds: 1 + 6 + 7 = 14. Write 4 and regroup 1 to the thousands.
4. Thousands: 1 + 1 + 3 = 5. Write 5.
5. 1,665 + 3,758 = 5,423

1,665 + 3,758 = ___

4. 5,172

1. Ones: 7 − 5 = 2
2. Tens: 0 is less than 3, so regroup 1 hundred as 10 tens. The hundreds digit becomes 8.
3. 10 − 3 = 7
4. Hundreds: 8 − 7 = 1
5. Thousands: 9 − 4 = 5
6. Check: 5,172 + 4,735 = 9,907

9,907 − 4,735 = ___

5. 7,888 apples. 7,888 apples are left.

1. Unknown: how many are left.
2. Bar model: the whole is 9,832; one part is 1,944; the other part is unknown.
3. Equation: 9,832 − 1,944 = ?
4. 9,832 − 1,944 = 7,888
5. Answer: 7,888 apples are left.

The orchard had 9,832 apples on a tree. The children picked 1,944. How many apples are left on the tree?

6. 2,642

1. Ones: 5 − 3 = 2
2. Tens: 0 is less than 6, so regroup 1 hundred as 10 tens. The hundreds digit becomes 8.
3. 10 − 6 = 4
4. Hundreds: 8 − 2 = 6
5. Thousands: 7 − 5 = 2
6. Check: 2,642 + 5,263 = 7,905

7,905 − 5,263 = ___

7. 202

1. Add the tens: 36 + 160 = 196
2. Add the ones: 196 + 6 = 202

36 + 166 = ___

8. 777

1. Take away the tens: 872 − 90 = 782
2. Take away the ones: 782 − 5 = 777

872 − 95 = ___

9. 285

1. Add the tens: 99 + 180 = 279
2. Add the ones: 279 + 6 = 285

99 + 186 = ___

10. 57 sacks. The miller has 57 sacks now.

1. Unknown: how many at the end.
2. Step 1: 42 + 52 = 94
3. Step 2: 94 − 37 = 57
4. Answer: The miller has 57 sacks now.

The miller had 42 sacks. A farmer brought 52 more. Then 37 sacks were sold. How many sacks does the miller have now?

11. 292 sacks. The miller has 292 sacks now.

1. Unknown: how many at the end.
2. Step 1: 386 + 182 = 568
3. Step 2: 568 − 276 = 292
4. Answer: The miller has 292 sacks now.

The miller had 386 sacks. A farmer brought 182 more. Then 276 sacks were sold. How many sacks does the miller have now?

12. 39 sacks. The miller has 39 sacks now.

1. Unknown: how many at the end.
2. Step 1: 67 + 47 = 114
3. Step 2: 114 − 75 = 39
4. Answer: The miller has 39 sacks now.

The miller had 67 sacks. A farmer brought 47 more. Then 75 sacks were sold. How many sacks does the miller have now?

Unit 3 Test: Meaning of Multiplication

School Launch · Grade 3 Math · Unit 3: Meaning of Multiplication · Worksheet A

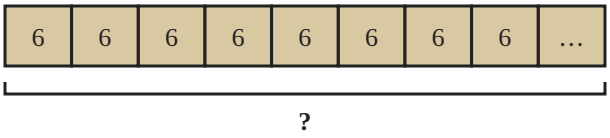
No calculator

Name _____ Date _____ Score _____ / 12

Show your work under each problem, one step per line, and check your answer. Word problems: name the unknown, draw a bar model if it helps, write the equation, solve, and answer in a sentence with units.

1. 5 × 7 = ___ MEDIUM

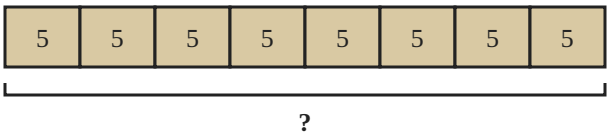
2. A crate holds 6 eggs. How many eggs fill 9 crates? HARD



3. 2 × 7 = ___ MEDIUM

4. 5 × 5 = ___ MEDIUM

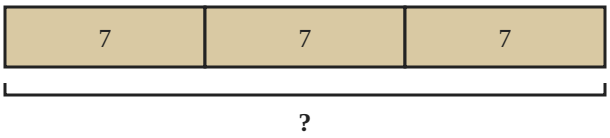
5. A wagon wheel has 5 spokes. How many spokes are on 8 wheels? HARD



6. 5 × 9 = ___ MEDIUM

7. 4 × 10 = ___ MEDIUM

8. A crate holds 7 eggs. How many eggs fill 3 crates? HARD



9. 5 × 4 = ___ MEDIUM

10. 10 × 6 = ___ MEDIUM

11. Find the missing number: ___ ÷ 4 = 7 HARD

12. 10 × 5 = ___ MEDIUM

Answer Key · Unit 3 Test: Meaning of Multiplication

School Launch · Grade 3 Math · Unit 3: Meaning of Multiplication · Worksheet A · for the parent

Key

1. 35

1. 5 groups of 7: 7 + 7 + 7 + 7 + 7 = 35

5 × 7 = ___

2. 54 eggs. 9 crates hold 54 eggs.

1. Unknown: the total.
2. Bar model: 9 equal parts of 6; the whole is unknown.
3. Equation: 9 × 6 = ?
4. 9 × 6 = 54
5. Answer: 9 crates hold 54 eggs.

A crate holds 6 eggs. How many eggs fill 9 crates?

3. 14

1. 2 groups of 7: 7 + 7 = 14

2 × 7 = ___

4. 25

1. 5 × 5 = 25
2. Check: 25 ÷ 5 = 5

5 × 5 = ___

5. 40 spokes. 8 wheels have 40 spokes.

1. Unknown: the total.
2. Bar model: 8 equal parts of 5; the whole is unknown.
3. Equation: 8 × 5 = ?
4. 8 × 5 = 40
5. Answer: 8 wheels have 40 spokes.

A wagon wheel has 5 spokes. How many spokes are on 8 wheels?

6. 45

1. Nines: ten groups, take away one group. 5 × 10 = 50
2. 50 − 5 = 45

5 × 9 = ___

7. 40

1. Fours: double, then double again. 10 × 2 = 20
2. 20 × 2 = 40

4 × 10 = ___

8. 21 eggs. 3 crates hold 21 eggs.

1. Unknown: the total.
2. Bar model: 3 equal parts of 7; the whole is unknown.
3. Equation: 3 × 7 = ?
4. 3 × 7 = 21
5. Answer: 3 crates hold 21 eggs.

A crate holds 7 eggs. How many eggs fill 3 crates?

9. 20

1. Fives: half of tens. 4 × 10 = 40
2. 40 ÷ 2 = 20

5 × 4 = ___

10. 60

1. 10 × 6 = 60
2. Check: 60 ÷ 6 = 10

10 × 6 = ___

11. 28

1. Think multiplication: 4 × 7 = 28
2. Check: 28 ÷ 4 = 7

Find the missing number: ___ ÷ 4 = 7

12. 50

1. Fives: half of tens. 10 × 10 = 100
2. 100 ÷ 2 = 50

10 × 5 = ___

Unit 4 Test: Meaning of Division

School Launch · Grade 3 Math · Unit 4: Meaning of Division · Worksheet A

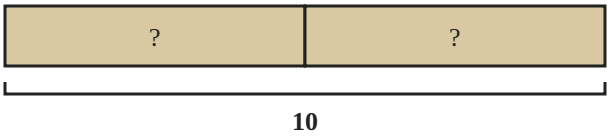
No calculator

Name _____ Date _____ Score _____ / 12

Show your work under each problem, one step per line, and check your answer. Word problems: name the unknown, draw a bar model if it helps, write the equation, solve, and answer in a sentence with units.

1. 25 ÷ 5 = ___ MEDIUM

2. 10 horseshoes are packed 2 to a crate. How many crates are filled? HARD



3. 15 ÷ 5 = ___ MEDIUM

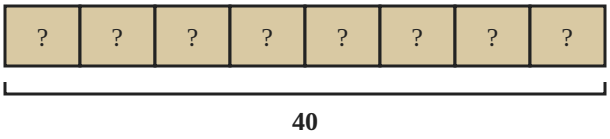
4. Find the missing number: ___ ÷ 9 = 5 MEDIUM

5. 6 ÷ 3 = ___ HARD

6. Find the missing number: ___ ÷ 8 = 6 MEDIUM

7. 35 ÷ 5 = ___ MEDIUM

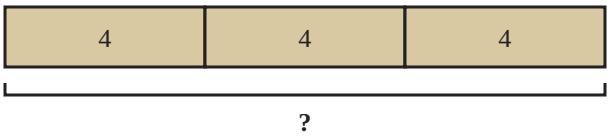
8. A farmer plants 40 seeds in 8 equal rows. How many seeds are in each row? HARD



9. 45 ÷ 5 = ___ MEDIUM

10. 24 ÷ 4 = ___ MEDIUM

11. Each of the 3 disciples carried 4 loaves. How many loaves did they carry? HARD



12. 12 ÷ 4 = ___ MEDIUM

Answer Key · Unit 4 Test: Meaning of Division

School Launch · Grade 3 Math · Unit 4: Meaning of Division · Worksheet A · for the parent

Key

1. 5

1. Share 25 into 5 equal groups.
2. Each group gets 5, because 5 × 5 = 25.

25 ÷ 5 = ___

2. 5 crates. 5 crates are filled.

1. Unknown: the size of each group.
2. Bar model: the whole is 10, cut into 2 equal parts.
3. Equation: 10 ÷ 2 = ?
4. 10 ÷ 2 = 5
5. Answer: 5 crates are filled.

10 horseshoes are packed 2 to a crate. How many crates are filled?

3. 3

1. Share 15 into 5 equal groups.
2. Each group gets 3, because 5 × 3 = 15.

15 ÷ 5 = ___

4. 45

1. Think multiplication: 9 × 5 = 45
2. Check: 45 ÷ 9 = 5

Find the missing number: ___ ÷ 9 = 5

5. 2

1. Think multiplication: 3 × ___ = 6
2. 3 × 2 = 6

6 ÷ 3 = ___

6. 48

1. Think multiplication: 8 × 6 = 48
2. Check: 48 ÷ 8 = 6

Find the missing number: ___ ÷ 8 = 6

7. 7

1. Think multiplication: 5 × ___ = 35
2. 5 × 7 = 35

35 ÷ 5 = ___

8. 5 seeds. Each row has 5 seeds.

1. Unknown: the size of each group.
2. Bar model: the whole is 40, cut into 8 equal parts.
3. Equation: 40 ÷ 8 = ?
4. 40 ÷ 8 = 5
5. Answer: Each row has 5 seeds.

A farmer plants 40 seeds in 8 equal rows. How many seeds are in each row?

9. 9

1. Think multiplication: 5 × ___ = 45
2. 5 × 9 = 45

45 ÷ 5 = ___

10. 6

1. Think multiplication: 4 × ___ = 24
2. 4 × 6 = 24

24 ÷ 4 = ___

11. 12 loaves. They carried 12 loaves.

1. Unknown: the total.
2. Bar model: 3 equal parts of 4; the whole is unknown.
3. Equation: 3 × 4 = ?
4. 3 × 4 = 12
5. Answer: They carried 12 loaves.

Each of the 3 disciples carried 4 loaves. How many loaves did they carry?

12. 3

1. Think multiplication: 4 × ___ = 12
2. 4 × 3 = 12

12 ÷ 4 = ___

Every answer was recomputed by an independent checker from the problem data, and every equation in the steps was evaluated.

Unit 5 Test: Harder Facts

School Launch · Grade 3 Math · Unit 5: Harder Facts · Worksheet A

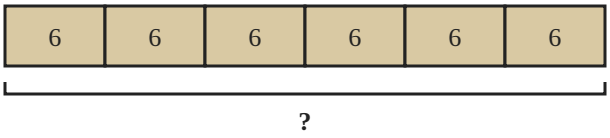
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Name _____ Date _____ Score _____ / 12

Show your work under each problem, one step per line, and check your answer. Word problems: name the unknown, draw a bar model if it helps, write the equation, solve, and answer in a sentence with units.

1. 9 × 6 = ___ MEDIUM

2. A wagon wheel has 6 spokes. How many spokes are on 6 wheels? HARD



3. 6 × 7 = ___ MEDIUM

4. 9 × 10 = ___ MEDIUM

5. 81 ÷ 9 = ___ HARD

6. 9 × 9 = ___ MEDIUM

7. 8 × 10 = ___ MEDIUM

8. 28 ÷ 7 = ___ HARD

9. 8 × 8 = ___ MEDIUM

10. 8 × 19 = ___ MEDIUM

11. 5 × 20 = ___ HARD

12. 9 × 13 = ___ MEDIUM

Answer Key · Unit 5 Test: Harder Facts

School Launch · Grade 3 Math · Unit 5: Harder Facts · Worksheet A · for the parent

Key

1. 54

1. Nines: ten groups, take away one group. 6 × 10 = 60
2. 60 − 6 = 54

9 × 6 = ___

2. 36 spokes. 6 wheels have 36 spokes.

1. Unknown: the total.
2. Bar model: 6 equal parts of 6; the whole is unknown.
3. Equation: 6 × 6 = ?
4. 6 × 6 = 36
5. Answer: 6 wheels have 36 spokes.

A wagon wheel has 6 spokes. How many spokes are on 6 wheels?

3. 42

1. Break 7 into 2 and 5: 6 × 2 = 12
2. 6 × 5 = 30
3. 12 + 30 = 42

6 × 7 = ___

4. 90

1. Nines: ten groups, take away one group. 10 × 10 = 100
2. 100 − 10 = 90

9 × 10 = ___

5. 9

1. Think multiplication: 9 × ___ = 81
2. 9 × 9 = 81

81 ÷ 9 = ___

6. 81

1. 9 × 9 = 81
2. Check: 81 ÷ 9 = 9

9 × 9 = ___

7. 80

1. 8 × 10 = 80
2. Check: 80 ÷ 10 = 8

8 × 10 = ___

8. 4

1. Think multiplication: 7 × ___ = 28
2. 7 × 4 = 28

28 ÷ 7 = ___

9. 64

1. 8 × 8 = 64
2. Check: 64 ÷ 8 = 8

8 × 8 = ___

10. 152

1. Break apart: 8 = 8 and 19 = 10 + 9
2. 8 × 10 = 80
3. 8 × 9 = 72
4. 80 + 72 = 152

8 × 19 = ___

11. 100

1. 20 = 2 × 10
2. 5 × 2 = 10
3. 10 × 10 = 100

5 × 20 = ___

12. 117

1. Break apart: 9 = 9 and 13 = 10 + 3
2. 9 × 10 = 90
3. 9 × 3 = 27
4. 90 + 27 = 117

9 × 13 = ___

Every answer was recomputed by an independent checker from the problem data, and every equation in the steps was evaluated.

Unit 6 Test: Fractions

School Launch · Grade 3 Math · Unit 6: Fractions · Worksheet A

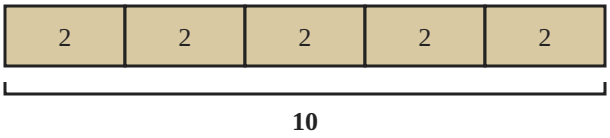
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Name _____ Date _____ Score _____ / 12

Show your work under each problem, one step per line, and check your answer. Word problems: name the unknown, draw a bar model if it helps, write the equation, solve, and answer in a sentence with units.

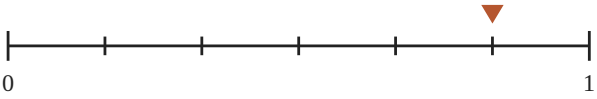
1. What is $\frac{2}{4}$ of 16 apples? MEDIUM

2. Jesus fed the crowd, and the disciples gathered 10 baskets of pieces. If $\frac{1}{5}$ of the baskets held bread and the rest fish, how many baskets held bread? HARD

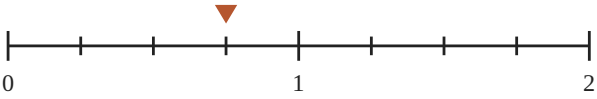


3. What is $\frac{2}{6}$ of 36 coins? MEDIUM

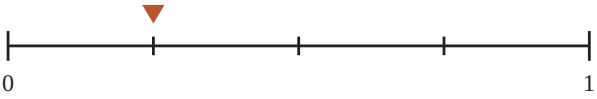
4. What fraction does the arrow point to? MEDIUM



5. What fraction does the arrow point to? HARD



6. What fraction does the arrow point to? MEDIUM



7. Fill in the missing number: $\frac{1}{2} = \frac{?}{4}$ MEDIUM

8. Fill in the missing number: $\frac{1}{3} = \frac{?}{9}$ HARD

9. Fill in the missing number: $\frac{1}{2} = \frac{?}{6}$ MEDIUM

10. Write < or > : $\frac{1}{8}$ ___ $\frac{1}{4}$ MEDIUM

11. Write < or > : $\frac{1}{5}$ ___ $\frac{1}{4}$ HARD

12. Write < or > : $\frac{1}{4}$ ___ $\frac{1}{2}$ MEDIUM

Answer Key · Unit 6 Test: Fractions

School Launch · Grade 3 Math · Unit 6: Fractions · Worksheet A · for the parent

Key

1. 8 apples

1. Split 16 into 4 equal groups: 16 ÷ 4 = 4 in each group.
2. Take 2 groups: 4 × 2 = 8

What is $\frac{2}{4}$ of 16 apples?

2. 2 baskets. 2 baskets held bread.

1. Unknown: the part.
2. Bar model: 10 split into 5 equal parts; take 1 of them.
3. One part: 10 ÷ 5 = 2
4. 1 parts: 2 × 1 = 2
5. Answer: 2 baskets held bread.

Jesus fed the crowd, and the disciples gathered 10 baskets of pieces. If $\frac{1}{5}$ of the baskets held bread and the rest fish, how many baskets held bread?

3. 12 coins

1. Split 36 into 6 equal groups: 36 ÷ 6 = 6 in each group.
2. Take 2 groups: 6 × 2 = 12

What is $\frac{2}{6}$ of 36 coins?

4. $\frac{5}{6}$

1. Each whole is cut into 6 equal parts, so each step is $\frac{1}{6}$.
2. The arrow is 5 steps from 0, so it points to $\frac{5}{6}$.

What fraction does the arrow point to?

5. $\frac{3}{4}$

1. Each whole is cut into 4 equal parts, so each step is $\frac{1}{4}$.
2. The arrow is 3 steps from 0, so it points to $\frac{3}{4}$.

What fraction does the arrow point to?

6. $\frac{1}{4}$

1. Each whole is cut into 4 equal parts, so each step is $\frac{1}{4}$.
2. The arrow is 1 steps from 0, so it points to $\frac{1}{4}$.

What fraction does the arrow point to?

7. 2

1. The denominator went from 2 to 4: 2 × 2 = 4.
2. Multiply the numerator by 2 too: 1 × 2 = 2
3. $\frac{1}{2} = \frac{2}{4}$

Fill in the missing number: $\frac{1}{2} = \frac{?}{4}$

8. 3

1. The denominator went from 3 to 9: 3 × 3 = 9.
2. Multiply the numerator by 3 too: 1 × 3 = 3
3. $\frac{1}{3} = \frac{3}{9}$

Fill in the missing number: $\frac{1}{3} = \frac{?}{9}$

9. 3

1. The denominator went from 2 to 6: 2 × 3 = 6.
2. Multiply the numerator by 3 too: 1 × 3 = 3
3. $\frac{1}{2} = \frac{3}{6}$

Fill in the missing number: $\frac{1}{2} = \frac{?}{6}$

10. $\frac{1}{8} < \frac{1}{4}$

1. Both have 1 part. Fewer cuts make bigger parts, so the smaller denominator wins.
2. $\frac{1}{8} < \frac{1}{4}$

Write < or > : $\frac{1}{8}$ ___ $\frac{1}{4}$

11. $\frac{1}{5} < \frac{1}{4}$

1. Both have 1 part. Fewer cuts make bigger parts, so the smaller denominator wins.
2. $\frac{1}{5} < \frac{1}{4}$

Write < or > : $\frac{1}{5}$ ___ $\frac{1}{4}$

12. $\frac{1}{4} < \frac{1}{2}$

1. Both have 1 part. Fewer cuts make bigger parts, so the smaller denominator wins.
2. $\frac{1}{4} < \frac{1}{2}$

Write < or > : $\frac{1}{4}$ ___ $\frac{1}{2}$

Every answer was recomputed by an independent checker from the problem data, and every equation in the steps was evaluated.

Unit 7 Test: Area and Perimeter

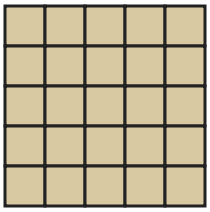
School Launch · Grade 3 Math · Unit 7: Area and Perimeter · Worksheet A

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Name _____ Date _____ Score _____ / 12

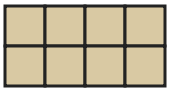
Show your work under each problem, one step per line, and check your answer. Word problems: name the unknown, draw a bar model if it helps, write the equation, solve, and answer in a sentence with units.

1. Each small square is 1 square unit. What is the area? MEDIUM

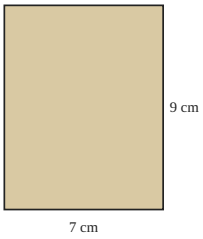


2. A garden is a 10 m by 11 m rectangle with a 2 m by 8 m corner taken out for a shed. What is the area of the garden? HARD

3. Each small square is 1 square unit. What is the area? MEDIUM

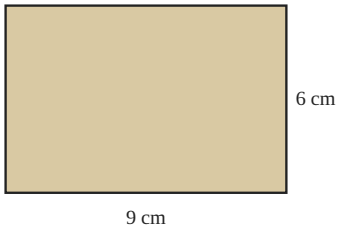


4. Find the area of a rectangle 7 cm long and 9 cm wide. MEDIUM



5. A rectangle has an area of 49 square centimeters. Its length is 7 cm. What is its width? HARD

6. Find the area of a rectangle 9 cm long and 6 cm wide. MEDIUM

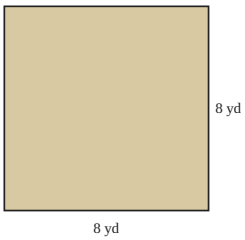


7. A field has sides of 9, 8, 3 and 8 m. How much fence goes all the way around? MEDIUM

8. A rectangular pen has a perimeter of 32 ft. Its length is 9 ft. What is its width? HARD

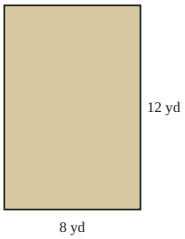
9. A field has sides of 4, 3, 9 and 9 m. How much fence goes all the way around? MEDIUM

10. Find the perimeter of a rectangle 8 yd long and 8 yd wide. MEDIUM



11. A garden is a 5 m by 12 m rectangle with a 3 m by 2 m corner taken out for a shed. What is the area of the garden? HARD

12. Find the perimeter of a rectangle 8 yd long and 12 yd wide. MEDIUM



Answer Key · Unit 7 Test: Area and Perimeter

School Launch · Grade 3 Math · Unit 7: Area and Perimeter · Worksheet A · for the parent

Key

1. 25 square units

1. There are 5 rows of 5 squares.
2. 5 × 5 = 25
3. Area = 25 square units

Each small square is 1 square unit. What is the area?

2. 94 square meters

1. Whole rectangle: 10 × 11 = 110
2. Shed corner: 2 × 8 = 16
3. 110 − 16 = 94

A garden is a 10 m by 11 m rectangle with a 2 m by 8 m corner taken out for a shed. What is the area of the garden?

3. 8 square units

1. There are 2 rows of 4 squares.
2. 2 × 4 = 8
3. Area = 8 square units

Each small square is 1 square unit. What is the area?

4. 63 square centimeters

1. Area = length × width
2. 7 × 9 = 63
3. Area = 63 square centimeters

Find the area of a rectangle 7 cm long and 9 cm wide.

5. 7 cm

1. Area = length × width, so 7 × ___ = 49.
2. 49 ÷ 7 = 7

A rectangle has an area of 49 square centimeters. Its length is 7 cm. What is its width?

6. 54 square centimeters

1. Area = length × width
2. 9 × 6 = 54
3. Area = 54 square centimeters

Find the area of a rectangle 9 cm long and 6 cm wide.

7. 28 m

1. 9 + 8 + 3 + 8 = 28
2. Perimeter = 28 m

A field has sides of 9, 8, 3 and 8 m. How much fence goes all the way around?

8. 7 ft

1. The two lengths: 2 × 9 = 18
2. 32 − 18 = 14 for the two widths
3. 14 ÷ 2 = 7

A rectangular pen has a perimeter of 32 ft. Its length is 9 ft. What is its width?

9. 25 m

1. 4 + 3 + 9 + 9 = 25
2. Perimeter = 25 m

A field has sides of 4, 3, 9 and 9 m. How much fence goes all the way around?

10. 32 yd

1. Add all four sides: 8 + 8 + 8 + 8 = 32
2. Perimeter = 32 yd

Find the perimeter of a rectangle 8 yd long and 8 yd wide.

11. 54 square meters

1. Whole rectangle: 5 × 12 = 60
2. Shed corner: 3 × 2 = 6
3. 60 − 6 = 54

A garden is a 5 m by 12 m rectangle with a 3 m by 2 m corner taken out for a shed. What is the area of the garden?

12. 40 yd

1. Add all four sides: 8 + 12 + 8 + 12 = 40
2. Perimeter = 40 yd

Find the perimeter of a rectangle 8 yd long and 12 yd wide.

Unit 8 Test: Time, Measure, Data

School Launch · Grade 3 Math · Unit 8: Time, Measure, Data · Worksheet A

No calculator

Name _____ Date _____ Score _____ / 12

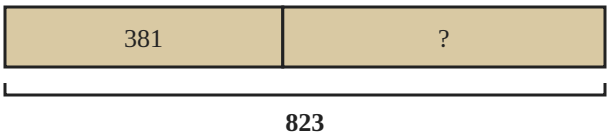
Show your work under each problem, one step per line, and check your answer. Word problems: name the unknown, draw a bar model if it helps, write the equation, solve, and answer in a sentence with units.

1. Father starts planting at 8:40. He works for 1 hour and 35 minutes. What time does he finish? MEDIUM

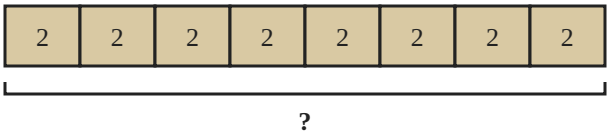
2. The bread goes in the oven at 2:50 and bakes for 50 minutes. When does it come out? HARD

3. Father starts planting at 4:40. He works for 1 hour and 20 minutes. What time does he finish? MEDIUM

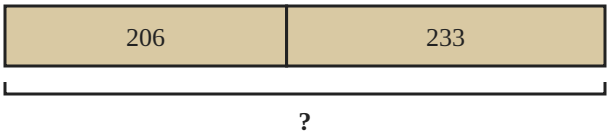
4. A shepherd had 823 sheep. 381 wandered off. How many sheep are still with him? HARD



5. A Roman soldier marched 2 miles a day for 8 days. How far did he march? HARD

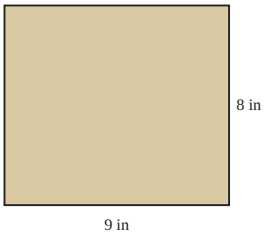


6. A carpenter cut 206 boards on Monday and 233 boards on Tuesday. How many boards did he cut? HARD



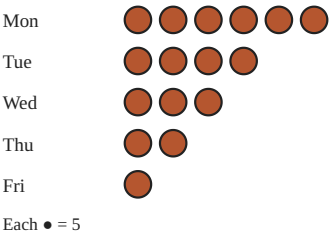
7. A quadrilateral has two pairs of parallel sides, no right angles, and sides that are not all equal. What is its most exact name? MEDIUM

8. Find the perimeter of a rectangle 9 in long and 8 in wide. HARD

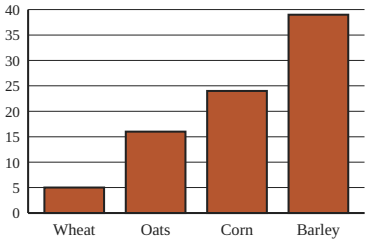


9. A quadrilateral has four right angles, but its sides are not all equal. What is its most exact name? MEDIUM

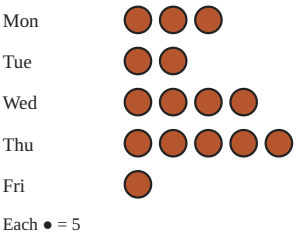
10. How many more Mon than Fri? MEDIUM



11. How many more Barley than Oats? HARD



12. Which day has the most? MEDIUM



Answer Key · Unit 8 Test: Time, Measure, Data

School Launch · Grade 3 Math · Unit 8: Time, Measure, Data · Worksheet A · for the parent

Key

1. 10:15

1. Add the hours first: 8:40 plus 1 hour is 9:40.
2. Add the minutes: 40 + 35 = 75. That is 1 hour and 15 minutes, so move to the next hour.
3. He finishes at 10:15.

Father starts planting at 8:40. He works for 1 hour and 35 minutes. What time does he finish?

2. 3:40. It comes out at 3:40.

1. 50 + 50 = 100 minutes, which is 1 hour 40 minutes.
2. The time is 3:40.

The bread goes in the oven at 2:50 and bakes for 50 minutes. When does it come out?

3. 6:00

1. Add the hours first: 4:40 plus 1 hour is 5:40.
2. Add the minutes: 40 + 20 = 60. That is 1 hour and 0 minutes, so move to the next hour.
3. He finishes at 6:00.

Father starts planting at 4:40. He works for 1 hour and 20 minutes. What time does he finish?

4. 442 sheep. 442 sheep are still with him.

1. Unknown: how many are left.
2. Bar model: the whole is 823; one part is 381; the other part is unknown.
3. Equation: 823 − 381 = ?
4. 823 − 381 = 442
5. Answer: 442 sheep are still with him.

A shepherd had 823 sheep. 381 wandered off. How many sheep are still with him?

5. 16 miles. He marched 16 miles.

1. Unknown: the total.
2. Bar model: 8 equal parts of 2; the whole is unknown.
3. Equation: 8 × 2 = ?
4. 8 × 2 = 16
5. Answer: He marched 16 miles.

A Roman soldier marched 2 miles a day for 8 days. How far did he march?

6. 439 boards. He cut 439 boards.

1. Unknown: the total.
2. Bar model: two parts, 206 and 233; the whole is unknown.
3. Equation: 206 + 233 = ?
4. 206 + 233 = 439
5. Answer: He cut 439 boards.

A carpenter cut 206 boards on Monday and 233 boards on Tuesday. How many boards did he cut?

7. parallelogram

1. Two pairs of parallel sides, no right angles, and sides that are not all equal: that is a parallelogram.

A quadrilateral has two pairs of parallel sides, no right angles, and sides that are not all equal. What is its most exact name?

8. 34 in

1. Add all four sides: 9 + 8 + 9 + 8 = 34
2. Perimeter = 34 in

Find the perimeter of a rectangle 9 in long and 8 in wide.

9. rectangle

1. Four right angles, but its sides are not all equal: that is a rectangle.

A quadrilateral has four right angles, but its sides are not all equal. What is its most exact name?

10. 25

1. Each circle stands for 5.
2. Mon: 30. Fri: 5.
3. 30 − 5 = 25

How many more Mon than Fri?

11. 23

1. Barley: 39. Oats: 16.
2. 39 − 16 = 23

How many more Barley than Oats?

12. Thu

1. Each circle stands for 5.
2. The biggest count is Thu, with 25.

Which day has the most?

Every answer was recomputed by an independent checker from the problem data, and every equation in the steps was evaluated.

Unit 9 Test: Review

School Launch · Grade 3 Math · Unit 9: Review · Worksheet A

No calculator

Name _____ Date _____ Score _____ / 12

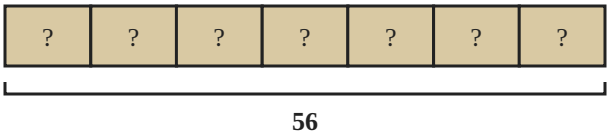
Show your work under each problem, one step per line, and check your answer. Word problems: name the unknown, draw a bar model if it helps, write the equation, solve, and answer in a sentence with units.

1. 44 ÷ 11 = ___ MEDIUM

2. Find the missing number: ___ ÷ 10 = 6 HARD

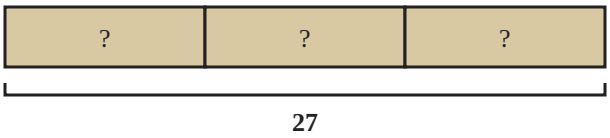
3. 99 ÷ 11 = ___ MEDIUM

4. A farmer plants 56 seeds in 7 equal rows. How many seeds are in each row? HARD

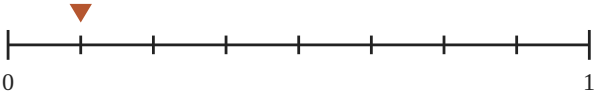


5. A merchant buys 7 jars of oil at 5 coins each. He also pays 25 coins in tax. How many coins does he spend in all? HARD

6. 27 horseshoes are packed 3 to a crate. How many crates are filled? HARD



7. What fraction does the arrow point to? MEDIUM



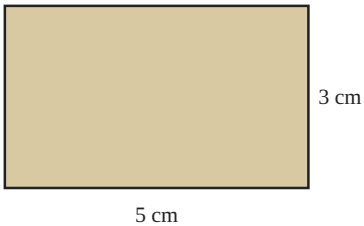
8. Write < or > : $\frac{3}{4}$ ___ $\frac{3}{8}$ MEDIUM

9. Fill in the missing number: $\frac{2}{4} = \frac{?}{8}$ HARD

10. 7,199 − 6,330 = ___ MEDIUM

11. 6 × 8 = ___ MEDIUM

12. Find the area of a rectangle 5 cm long and 3 cm wide. MEDIUM



Answer Key · Unit 9 Test: Review

School Launch · Grade 3 Math · Unit 9: Review · Worksheet A · for the parent

Key

1. 4

1. Think multiplication: 11 × ___ = 44
2. 11 × 4 = 44

44 ÷ 11 = ___

2. 60

1. Think multiplication: 10 × 6 = 60
2. Check: 60 ÷ 10 = 6

Find the missing number: ___ ÷ 10 = 6

3. 9

1. Think multiplication: 11 × ___ = 99
2. 11 × 9 = 99

99 ÷ 11 = ___

4. 8 seeds. Each row has 8 seeds.

1. Unknown: the size of each group.
2. Bar model: the whole is 56, cut into 7 equal parts.
3. Equation: 56 ÷ 7 = ?
4. 56 ÷ 7 = 8
5. Answer: Each row has 8 seeds.

A farmer plants 56 seeds in 7 equal rows. How many seeds are in each row?

5. 60 coins. He spends 60 coins.

1. Unknown: the final amount.
2. Two steps: first find the total of the equal groups, then add the extra.
3. Cost of the jars: 7 × 5 = 35
4. Add the tax: 35 + 25 = 60
5. Answer: He spends 60 coins.

A merchant buys 7 jars of oil at 5 coins each. He also pays 25 coins in tax. How many coins does he spend in all?

6. 9 crates. 9 crates are filled.

1. Unknown: the size of each group.
2. Bar model: the whole is 27, cut into 3 equal parts.
3. Equation: 27 ÷ 3 = ?
4. 27 ÷ 3 = 9
5. Answer: 9 crates are filled.

27 horseshoes are packed 3 to a crate. How many crates are filled?

7. $\frac{1}{8}$

1. Each whole is cut into 8 equal parts, so each step is $\frac{1}{8}$.
2. The arrow is 1 steps from 0, so it points to $\frac{1}{8}$.

What fraction does the arrow point to?

8. $\frac{3}{4} > \frac{3}{8}$

1. Both have 3 parts. Fewer cuts make bigger parts, so the smaller denominator wins.
2. $\frac{3}{4} > \frac{3}{8}$

Write < or > : $\frac{3}{4}$ ___ $\frac{3}{8}$

9. 4

1. The denominator went from 4 to 8: 4 × 2 = 8.
2. Multiply the numerator by 2 too: 2 × 2 = 4
3. $\frac{2}{4} = \frac{4}{8}$

Fill in the missing number: $\frac{2}{4} = \frac{?}{8}$

10. 869

1. Ones: 9 − 0 = 9
2. Tens: 9 − 3 = 6
3. Hundreds: 1 is less than 3, so regroup 1 thousand as 10 hundreds. The thousands digit becomes 6.
4. 11 − 3 = 8
5. Thousands: 6 − 6 = 0
6. Check: 869 + 6,330 = 7,199

7,199 − 6,330 = ___

11. 48

1. Break 8 into 3 and 5: 6 × 3 = 18
2. 6 × 5 = 30
3. 18 + 30 = 48

6 × 8 = ___

12. 15 square centimeters

1. Area = length × width
2. 5 × 3 = 15
3. Area = 15 square centimeters

Find the area of a rectangle 5 cm long and 3 cm wide.

Every answer was recomputed by an independent checker from the problem data, and every equation in the steps was evaluated.

Midterm Exam

School Launch · Grade 3 Math · Units 1–4 · Worksheet A

No calculator

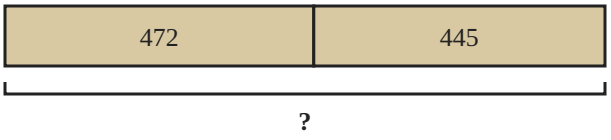
Name _____ Date _____ Score _____ / 16

Show your work under each problem, one step per line, and check your answer. Word problems: name the unknown, draw a bar model if it helps, write the equation, solve, and answer in a sentence with units.

1. Write the number in digits: *six thousand three hundred fifty-one* HARD

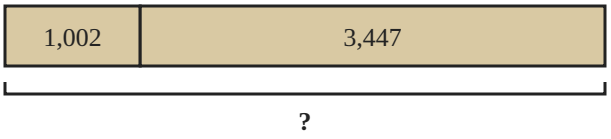
2. Round 162 to the nearest 100. HARD

3. Noah led 472 sheep into the ark, then 445 more. How many sheep went in? HARD

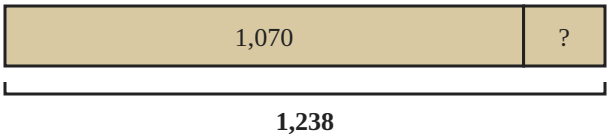


4. What number is the Roman numeral LIX? HARD

5. The baker made 1,002 rolls and 3,447 loaves. How many pieces of bread did she make? HARD



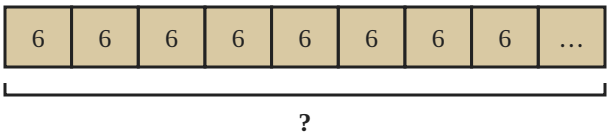
6. A blacksmith had 1,238 nails. He used 1,070 to shoe the horses. How many nails are left? HARD



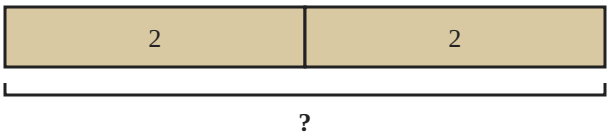
7. 530 − 68 = ___ HARD

8. Anna picked 303 plums and Ben picked 412. They ate 442 of them. How many plums are left? HARD

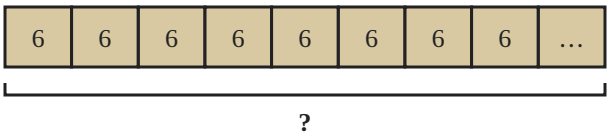
9. A crate holds 6 eggs. How many eggs fill 9 crates? HARD



10. A cobbler makes 2 pairs of shoes a day. How many pairs does he make in 2 days? HARD

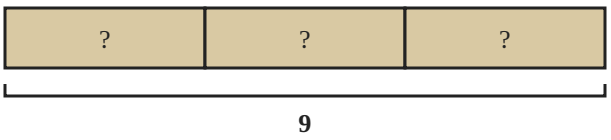


11. A Roman soldier marched 6 miles a day for 9 days. How far did he march? HARD



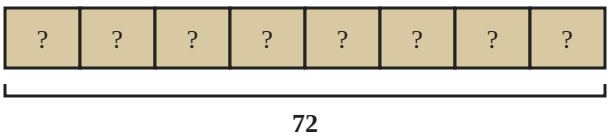
12. Find the missing number: ___ ÷ 2 = 5 HARD

13. A weaver has 9 feet of cloth. She cuts it into pieces 3 feet long. How many pieces does she get? HARD

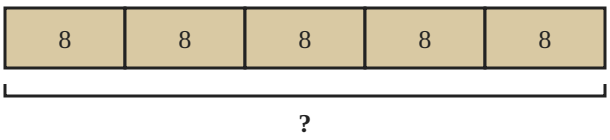


14. 40 ÷ 5 = ___ HARD

15. A weaver has 72 feet of cloth. She cuts it into pieces 8 feet long. How many pieces does she get? HARD



16. A Roman soldier marched 8 miles a day for 5 days. How far did he march? HARD



Answer Key · Midterm Exam

School Launch · Grade 3 Math · Units 1–4 · Worksheet A · for the parent

Key

1. 6,351

1. Read it in groups: six thousand three hundred fifty-one → 6,351

Write the number in digits: *six thousand three hundred fifty-one*

2. 200

1. 162 is between 100 and 200.
2. Look at the tens digit: 6. 5 or more, so round up.
3. 162 rounds to 200.

Round 162 to the nearest 100.

3. 917 sheep. 917 sheep went into the ark.

1. Unknown: the total.
2. Bar model: two parts, 472 and 445; the whole is unknown.
3. Equation: 472 + 445 = ?
4. 472 + 445 = 917
5. Answer: 917 sheep went into the ark.

Noah led 472 sheep into the ark, then 445 more. How many sheep went in?

4. 59

1. Read the parts: L = 50, IX = 9
2. 50 + 9 = 59

What number is the Roman numeral LIX?

5. 4,449 pieces. She made 4,449 pieces of bread.

1. Unknown: the total.
2. Bar model: two parts, 1,002 and 3,447; the whole is unknown.
3. Equation: 1,002 + 3,447 = ?
4. 1,002 + 3,447 = 4,449
5. Answer: She made 4,449 pieces of bread.

The baker made 1,002 rolls and 3,447 loaves. How many pieces of bread did she make?

6. 168 nails. 168 nails are left.

1. Unknown: how many are left.
2. Bar model: the whole is 1,238; one part is 1,070; the other part is unknown.
3. Equation: 1,238 − 1,070 = ?
4. 1,238 − 1,070 = 168
5. Answer: 168 nails are left.

A blacksmith had 1,238 nails. He used 1,070 to shoe the horses. How many nails are left?

7. 462

1. Take away the tens: 530 − 60 = 470
2. Take away the ones: 470 − 8 = 462

530 − 68 = ___

8. 273 plums. 273 plums are left.

1. Unknown: how many at the end.
2. Step 1: 303 + 412 = 715
3. Step 2: 715 − 442 = 273
4. Answer: 273 plums are left.

Anna picked 303 plums and Ben picked 412. They ate 442 of them. How many plums are left?

9. 54 eggs. 9 crates hold 54 eggs.

1. Unknown: the total.
2. Bar model: 9 equal parts of 6; the whole is unknown.
3. Equation: 9 × 6 = ?
4. 9 × 6 = 54
5. Answer: 9 crates hold 54 eggs.

A crate holds 6 eggs. How many eggs fill 9 crates?

10. 4 pairs. He makes 4 pairs.

1. Unknown: the total.
2. Bar model: 2 equal parts of 2; the whole is unknown.
3. Equation: 2 × 2 = ?
4. 2 × 2 = 4
5. Answer: He makes 4 pairs.

A cobbler makes 2 pairs of shoes a day. How many pairs does he make in 2 days?

11. 54 miles. He marched 54 miles.

1. Unknown: the total.
2. Bar model: 9 equal parts of 6; the whole is unknown.
3. Equation: 9 × 6 = ?
4. 9 × 6 = 54
5. Answer: He marched 54 miles.

A Roman soldier marched 6 miles a day for 9 days. How far did he march?

12. 10

1. Think multiplication: 2 × 5 = 10
2. Check: 10 ÷ 2 = 5

Find the missing number: ___ ÷ 2 = 5

13. 3 pieces. She gets 3 pieces.

1. Unknown: the size of each group.
2. Bar model: the whole is 9, cut into 3 equal parts.
3. Equation: 9 ÷ 3 = ?
4. 9 ÷ 3 = 3
5. Answer: She gets 3 pieces.

A weaver has 9 feet of cloth. She cuts it into pieces 3 feet long. How many pieces does she get?

14. 8

1. Think multiplication: 5 × ___ = 40
2. 5 × 8 = 40

40 ÷ 5 = ___

15. 9 pieces. She gets 9 pieces.

1. Unknown: the size of each group.
2. Bar model: the whole is 72, cut into 8 equal parts.
3. Equation: 72 ÷ 8 = ?
4. 72 ÷ 8 = 9
5. Answer: She gets 9 pieces.

A weaver has 72 feet of cloth. She cuts it into pieces 8 feet long. How many pieces does she get?

16. 40 miles. He marched 40 miles.

1. Unknown: the total.
2. Bar model: 5 equal parts of 8; the whole is unknown.
3. Equation: 5 × 8 = ?
4. 5 × 8 = 40
5. Answer: He marched 40 miles.

A Roman soldier marched 8 miles a day for 5 days. How far did he march?

Every answer was recomputed by an independent checker from the problem data, and every equation in the steps was evaluated.

End-of-Year Exam

School Launch · Grade 3 Math · Units 1–8 · Worksheet A

No calculator

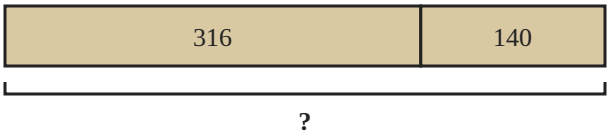
Name _____ Date _____ Score _____ / 24

Show your work under each problem, one step per line, and check your answer. Word problems: name the unknown, draw a bar model if it helps, write the equation, solve, and answer in a sentence with units.

1. Write the number in digits: *four thousand six hundred forty-three* HARD

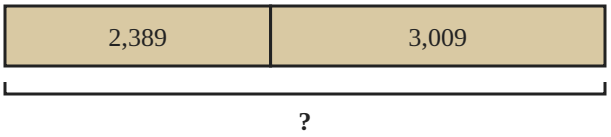
2. Round 189 to the nearest 100. HARD

3. A carpenter cut 316 boards on Monday and 140 boards on Tuesday. How many boards did he cut? HARD

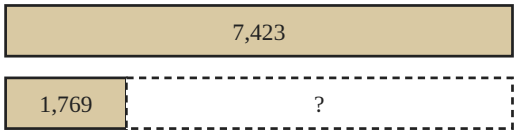


4. What number is the Roman numeral LI? HARD

5. A Roman legion marched 2,389 miles one week and 3,009 miles the next. How far did it march? HARD



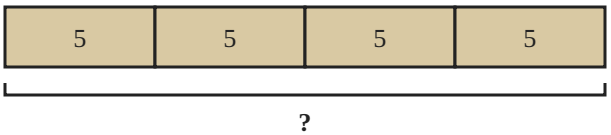
6. Sarah sewed 7,423 stitches and Anna sewed 1,769. How many fewer stitches did Anna sew? HARD



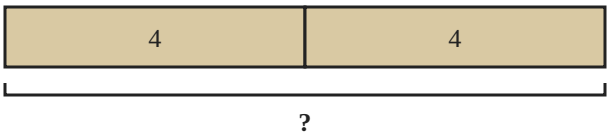
7. 442 − 43 = ___ HARD

8. Peter caught 402 fish and Andrew caught 213. They gave 366 to a widow. How many fish do they have left? HARD

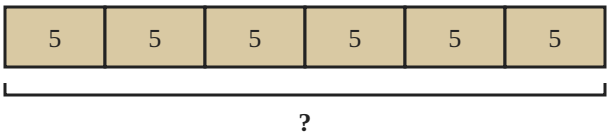
9. Each of the 4 disciples carried 5 loaves. How many loaves did they carry? HARD



10. There are 2 rows in the garden with 4 cabbages in each row. How many cabbages are there? HARD

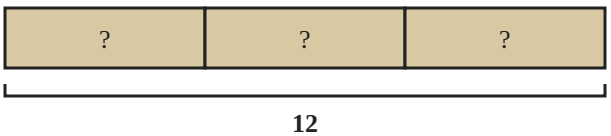


11. A crate holds 5 eggs. How many eggs fill 6 crates? HARD



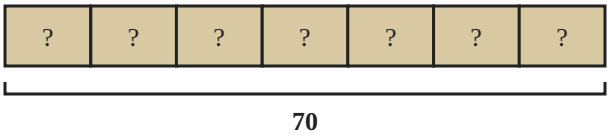
12. Find the missing number: ___ ÷ 3 = 3 HARD

13. 12 apples are shared equally among 3 baskets. How many apples go in each basket? HARD

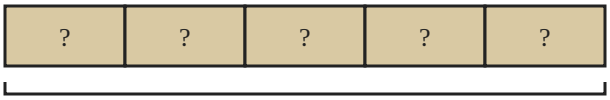


14. 42 ÷ 7 = ___ HARD

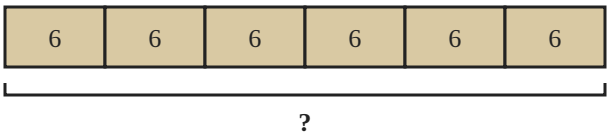
15. A farmer plants 70 seeds in 7 equal rows. How many seeds are in each row? HARD



16. The twelve tribes of Israel shared the land. If 25 sheep were split equally among 5 families, how many sheep did each family get? HARD



17. A cobbler makes 6 pairs of shoes a day. How many pairs does he make in 6 days? HARD

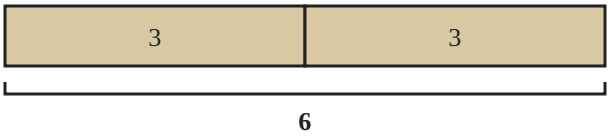


18. 54 ÷ 9 = ___ HARD

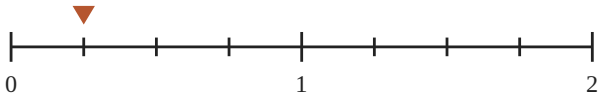
19. 70 ÷ 7 = ___ HARD

20. 8 × 10 = ___ HARD

21. Jesus fed the crowd, and the disciples gathered 6 baskets of pieces. If $\frac{1}{2}$ of the baskets held bread and the rest fish, how many baskets held bread? HARD



22. What fraction does the arrow point to? HARD



23. Fill in the missing number: $\frac{3}{4} = \frac{?}{12}$ HARD

24. Write < or > : $\frac{1}{3}$ ___ $\frac{1}{5}$ HARD

Answer Key · End-of-Year Exam

School Launch · Grade 3 Math · Units 1–8 · Worksheet A · for the parent

Key

1. 4,643

1. Read it in groups: four thousand six hundred forty-three → 4,643

Write the number in digits: *four thousand six hundred forty-three*

2. 200

1. 189 is between 100 and 200.
2. Look at the tens digit: 8. 5 or more, so round up.
3. 189 rounds to 200.

Round 189 to the nearest 100.

3. 456 boards. He cut 456 boards.

1. Unknown: the total.
2. Bar model: two parts, 316 and 140; the whole is unknown.
3. Equation: 316 + 140 = ?
4. 316 + 140 = 456
5. Answer: He cut 456 boards.

A carpenter cut 316 boards on Monday and 140 boards on Tuesday. How many boards did he cut?

4. 51

1. Read the parts: L = 50, I = 1
2. 50 + 1 = 51

What number is the Roman numeral LI?

5. 5,398 miles. It marched 5,398 miles.

1. Unknown: the total.
2. Bar model: two parts, 2,389 and 3,009; the whole is unknown.
3. Equation: 2,389 + 3,009 = ?
4. 2,389 + 3,009 = 5,398
5. Answer: It marched 5,398 miles.

A Roman legion marched 2,389 miles one week and 3,009 miles the next. How far did it march?

6. 5,654 stitches. Anna sewed 5,654 fewer stitches.

1. Unknown: the difference.
2. Bar model: a long bar of 7,423 and a short bar of 1,769; the difference is unknown.
3. Equation: 7,423 − 1,769 = ?
4. 7,423 − 1,769 = 5,654
5. Answer: Anna sewed 5,654 fewer stitches.

Sarah sewed 7,423 stitches and Anna sewed 1,769. How many fewer stitches did Anna sew?

7. 399

1. Take away the tens: 442 − 40 = 402
2. Take away the ones: 402 − 3 = 399

442 − 43 = ___

8. 249 fish. They have 249 fish left.

1. Unknown: how many at the end.
2. Step 1: 402 + 213 = 615
3. Step 2: 615 − 366 = 249
4. Answer: They have 249 fish left.

Peter caught 402 fish and Andrew caught 213. They gave 366 to a widow. How many fish do they have left?

9. 20 loaves. They carried 20 loaves.

1. Unknown: the total.
2. Bar model: 4 equal parts of 5; the whole is unknown.
3. Equation: 4 × 5 = ?
4. 4 × 5 = 20
5. Answer: They carried 20 loaves.

Each of the 4 disciples carried 5 loaves. How many loaves did they carry?

10. 8 cabbages. There are 8 cabbages.

1. Unknown: the total.
2. Bar model: 2 equal parts of 4; the whole is unknown.
3. Equation: 2 × 4 = ?
4. 2 × 4 = 8
5. Answer: There are 8 cabbages.

There are 2 rows in the garden with 4 cabbages in each row. How many cabbages are there?

11. 30 eggs. 6 crates hold 30 eggs.

1. Unknown: the total.
2. Bar model: 6 equal parts of 5; the whole is unknown.
3. Equation: 6 × 5 = ?
4. 6 × 5 = 30
5. Answer: 6 crates hold 30 eggs.

A crate holds 5 eggs. How many eggs fill 6 crates?

12. 9

1. Think multiplication: 3 × 3 = 9
2. Check: 9 ÷ 3 = 3

Find the missing number: ___ ÷ 3 = 3

13. 4 apples. Each basket gets 4 apples.

1. Unknown: the size of each group.
2. Bar model: the whole is 12, cut into 3 equal parts.
3. Equation: 12 ÷ 3 = ?
4. 12 ÷ 3 = 4
5. Answer: Each basket gets 4 apples.

12 apples are shared equally among 3 baskets. How many apples go in each basket?

14. 6

1. Think multiplication: 7 × ___ = 42
2. 7 × 6 = 42

42 ÷ 7 = ___

15. 10 seeds. Each row has 10 seeds.

1. Unknown: the size of each group.
2. Bar model: the whole is 70, cut into 7 equal parts.
3. Equation: 70 ÷ 7 = ?
4. 70 ÷ 7 = 10
5. Answer: Each row has 10 seeds.

A farmer plants 70 seeds in 7 equal rows. How many seeds are in each row?

16. 5 sheep. Each family got 5 sheep.

1. Unknown: the size of each group.
2. Bar model: the whole is 25, cut into 5 equal parts.
3. Equation: 25 ÷ 5 = ?
4. 25 ÷ 5 = 5
5. Answer: Each family got 5 sheep.

The twelve tribes of Israel shared the land. If 25 sheep were split equally among 5 families, how many sheep did each family get?

Every answer was recomputed by an independent checker from the problem data, and every equation in the steps was evaluated.

17. 36 pairs. He makes 36 pairs.

1. Unknown: the total.
2. Bar model: 6 equal parts of 6; the whole is unknown.
3. Equation: 6 × 6 = ?
4. 6 × 6 = 36
5. Answer: He makes 36 pairs.

A cobbler makes 6 pairs of shoes a day. How many pairs does he make in 6 days?

---

18. 6

1. Think multiplication: 9 × ___ = 54
2. 9 × 6 = 54

54 ÷ 9 = ___

---

19. 10

1. Think multiplication: 7 × ___ = 70
2. 7 × 10 = 70

70 ÷ 7 = ___

---

20. 80

1. 10 = 1 × 10
2. 8 × 1 = 8
3. 8 × 10 = 80

8 × 10 = ___

---

21. 3 baskets. 3 baskets held bread.

1. Unknown: the part.
2. Bar model: 6 split into 2 equal parts; take 1 of them.
3. One part: 6 ÷ 2 = 3
4. 1 parts: 3 × 1 = 3
5. Answer: 3 baskets held bread.

Jesus fed the crowd, and the disciples gathered 6 baskets of pieces. If $\frac{1}{2}$ of the baskets held bread and the rest fish, how many baskets held bread?

---

22. $\frac{1}{4}$

1. Each whole is cut into 4 equal parts, so each step is $\frac{1}{4}$.
2. The arrow is 1 steps from 0, so it points to $\frac{1}{4}$.

What fraction does the arrow point to?

---

23. 9

1. The denominator went from 4 to 12: 4 × 3 = 12.
2. Multiply the numerator by 3 too: 3 × 3 = 9
3. $\frac{3}{4} = \frac{9}{12}$

Fill in the missing number: $\frac{3}{4} = \frac{?}{12}$

---

24. $\frac{1}{3} > \frac{1}{5}$

1. Both have 1 part. Fewer cuts make bigger parts, so the smaller denominator wins.
2. $\frac{1}{3} > \frac{1}{5}$

Write < or > : $\frac{1}{3}$ ___ $\frac{1}{5}$

Every answer was recomputed by an independent checker from the problem data, and every equation in the steps was evaluated.