



# Table of Contents



Introduction	3
Practice 1: Understanding the Idea of a Fraction	4
Practice 2: Understanding Fractions — Parts of a Whole	5
Practice 3: Visualizing Equivalent Fractions	6
Practice 4: Equivalent Fractions Using Number Lines	7
Practice 5: Equivalent Fractions Less Than, Greater Than, and Equal to One	8
Practice 6: Comparing and Ordering Fractions Less Than One	9
Practice 7: Reducing Fractions to Lowest Terms	10
Practice 8: Adding Fractions with Common Denominators	11
Practice 9: Subtracting Fractions with Common Denominators	12
Practice 10: Proper Fractions, Improper Fractions, and Mixed Numbers	13
Practice 11: Converting Improper Fractions to Mixed Numbers	14
Practice 12: Converting Mixed Numbers to Improper Fractions	15
Practice 13: Adding and Subtracting Mixed Numbers with Common Denominators	16
Practice 14: Computing Common Denominators	17
Practice 15: Comparing Fractions by Computing Common Denominators	18
Practice 16: Ordering Proper Fractions with Uncommon Denominators	19
Practice 17: Determining the Lowest Common Denominator/Least Common Multiple	20
Practice 18: Adding and Subtracting Fractions with Unlike Denominators	21
Practice 19: Visualizing Decimals Less Than One	22
Practice 20: Writing Decimals Less Than One	23
Practice 21: Comparing Fractions and Decimals on a Number Line	24
Practice 22: Working With Decimals Greater Than One	25
Practice 23: Comparing Decimals on a Number Line	26
Practice 24: Ordering Decimals	27
Practice 25: Rounding Decimals to Whole Numbers and Tenths	28
Practice 26: Adding Decimals	29
Practice 27: Subtracting Decimals	30
Practice 28: Estimating Sums and Differences with Decimals	31
Practice 29: Adding and Subtracting Money	32
Practice 30: Understanding Percents	33
Practice 31: Understanding Percents	34
Practice 32: Converting Decimals to Percents	35
Practice 33: Converting Percents to Decimals	36
Practice 34: Converting Fractions and Percents	37
Practice 35: Percents over 100	38
Practice 36: Computing Percents	39
Test Practice 1	40
Test Practice 2	41
Test Practice 3	42
Test Practice 4	43
Test Practice 5	44
Test Practice 6	45
Answer Sheet	46
Answer Key	47

# Practice 3



## Reminder

Equivalent fractions represent equal amounts divided into a different number of pieces. Equivalent fractions are equal to each other.

The illustration shows that  $\frac{2}{2}$  is equal to  $\frac{4}{4}$  and that both are equal to 1.



**Directions:** Name the equivalent fractions represented in the illustrations below. Note that all these equivalent fractions are less than 1. Write the missing numerators and shade in the fraction bars to match. The first two are done for you.

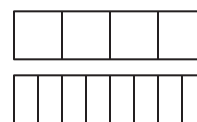
1.  $\frac{1}{2} = \frac{2}{4}$



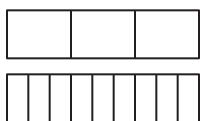
2.  $\frac{1}{3} = \frac{2}{6}$



3.  $\frac{1}{4} = \frac{1}{8}$



4.  $\frac{1}{3} = \frac{1}{9}$



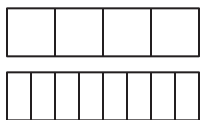
5.  $\frac{1}{2} = \frac{1}{8}$



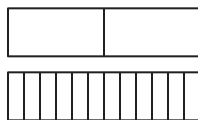
6.  $\frac{1}{5} = \frac{1}{10}$



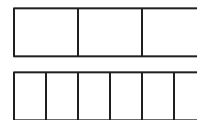
7.  $\frac{3}{4} = \frac{3}{8}$



8.  $\frac{1}{2} = \frac{1}{12}$



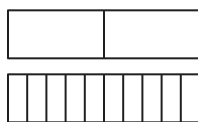
9.  $\frac{2}{3} = \frac{2}{6}$



10.  $\frac{1}{4} = \frac{1}{12}$



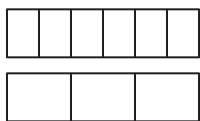
11.  $\frac{1}{2} = \frac{1}{10}$



12.  $\frac{2}{3} = \frac{2}{9}$



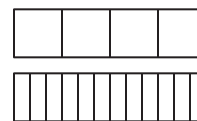
13.  $\frac{1}{6} = \frac{2}{3}$



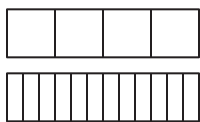
14.  $\frac{1}{8} = \frac{3}{4}$



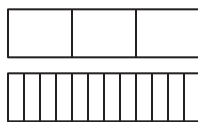
15.  $\frac{1}{4} = \frac{3}{12}$



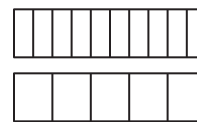
16.  $\frac{1}{4} = \frac{9}{12}$



17.  $\frac{2}{3} = \frac{2}{12}$



18.  $\frac{8}{10} = \frac{4}{5}$



# Practice 13



## Reminder

You can add mixed numbers by adding the whole numbers and then adding the fractions.

Example:  $1\frac{1}{4} + 2\frac{2}{4} = 3\frac{3}{4}$

You may need to reduce the fractions to simplest terms.

Example:  $2\frac{1}{3} + 2\frac{2}{3} = 4\frac{3}{3} = 4 + 1 = 5$

**Directions:** Add or subtract these mixed numbers. Reduce the fractions to simplest terms. The first two are done for you.

$$\begin{array}{r} 1. \quad 1\frac{1}{4} \\ + 3\frac{1}{4} \\ \hline 4\frac{2}{4} = 4\frac{1}{2} \end{array}$$

$$\begin{array}{r} 2. \quad 4\frac{3}{3} \\ - 2\frac{1}{3} \\ \hline 2\frac{2}{3} \end{array}$$

$$\begin{array}{r} 3. \quad 7\frac{4}{5} \\ - 2\frac{3}{5} \\ \hline \end{array}$$

$$\begin{array}{r} 4. \quad 3\frac{5}{6} \\ - 1\frac{4}{6} \\ \hline \end{array}$$

$$\begin{array}{r} 5. \quad 6\frac{3}{4} \\ - 3\frac{2}{4} \\ \hline \end{array}$$

$$\begin{array}{r} 6. \quad 9\frac{7}{12} \\ + 2\frac{4}{12} \\ \hline \end{array}$$

$$\begin{array}{r} 7. \quad 4\frac{2}{6} \\ + 3\frac{2}{6} \\ \hline \end{array}$$

$$\begin{array}{r} 8. \quad 5\frac{8}{10} \\ - 2\frac{7}{10} \\ \hline \end{array}$$

$$\begin{array}{r} 9. \quad 3\frac{4}{5} \\ - 2\frac{3}{5} \\ \hline \end{array}$$

$$\begin{array}{r} 10. \quad 7\frac{5}{6} \\ - 3\frac{4}{6} \\ \hline \end{array}$$

$$\begin{array}{r} 11. \quad 6\frac{2}{3} \\ - 3\frac{1}{3} \\ \hline \end{array}$$

$$\begin{array}{r} 12. \quad 9\frac{3}{4} \\ - 6\frac{1}{4} \\ \hline \end{array}$$

$$\begin{array}{r} 13. \quad 6\frac{3}{6} \\ + 2\frac{1}{6} \\ \hline \end{array}$$

$$\begin{array}{r} 14. \quad 10\frac{1}{3} \\ + 5\frac{2}{3} \\ \hline \end{array}$$

$$\begin{array}{r} 15. \quad 2\frac{1}{5} \\ - 1\frac{1}{5} \\ \hline \end{array}$$

$$\begin{array}{r} 16. \quad 4\frac{7}{10} \\ + 2\frac{3}{10} \\ \hline \end{array}$$

$$\begin{array}{r} 17. \quad 4\frac{2}{7} \\ - 1\frac{2}{7} \\ \hline \end{array}$$

$$\begin{array}{r} 18. \quad 3\frac{7}{12} \\ + 2\frac{5}{12} \\ \hline \end{array}$$

$$\begin{array}{r} 19. \quad 5\frac{4}{13} \\ + 2\frac{9}{13} \\ \hline \end{array}$$

$$\begin{array}{r} 20. \quad 4\frac{3}{4} \\ + 2\frac{1}{4} \\ \hline \end{array}$$

$$\begin{array}{r} 21. \quad 8\frac{4}{8} \\ - 2\frac{1}{8} \\ \hline \end{array}$$

$$\begin{array}{r} 22. \quad 7\frac{3}{11} \\ - 4\frac{3}{11} \\ \hline \end{array}$$

$$\begin{array}{r} 23. \quad 5\frac{7}{8} \\ + 2\frac{1}{8} \\ \hline \end{array}$$

$$\begin{array}{r} 24. \quad 7\frac{3}{4} \\ - 2\frac{2}{4} \\ \hline \end{array}$$

$$\begin{array}{r} 25. \quad 8\frac{4}{7} \\ - 1\frac{3}{7} \\ \hline \end{array}$$

# Practice 36



## Reminder

Percents are computed this way: 25% of 60 =

- |   |               |             |
|---|---------------|-------------|
|   | <u>60</u>     |             |
| 1. Convert the percent to a decimal: $25\% = 0.25$  | $\times 0.25$ |             |
|   | <u>300</u>    |             |
| 2. Multiply the decimal times the whole number using the ladder form.   |               |             |
| 3. Keep the decimal in the answer the same number of places to the left as there are decimal places in the original multiplication problem. In this case, it is two places to the left. | $+1200$       |             |
|   | <u>15.00</u>  | Answer = 15 |

**Directions:** Compute the percents of each number listed below. The first two are done for you.

1. 30% of 50 = 15

$$\begin{array}{r} 50 \\ \times 0.30 \\ \hline 15.00 \end{array}$$

2. 24% of 40 = 9.6

$$\begin{array}{r} 40 \\ \times 0.24 \\ \hline 160 \\ + 800 \\ \hline 9.60 \end{array}$$

3. 50% of 68 =

$$\begin{array}{r} 68 \\ \times 0.50 \\ \hline \end{array}$$

4. 20% of 58 =

5. 9% of 90 =

6. 70% of 50 =

7. 40% of 200 =

8. 60% of 40 =

9. 25% of 80 =

10. 15% of 48 =

11. 60% of 20 =

12. 75% of 80 =

13. 11% of 44 =

14. 25% of 60 =

15. 3% of 200 =

16. 44% of 80 =

17. 36% of 60 =

18. 22% of 50 =

---



# Table of Contents



Introduction	3
Practice 1: Using the Multiplication Chart for Division	4
Practice 2: Repeated Subtraction	5
Practice 3: Division Facts 1, 2, 3, 4, and 5	6
Practice 4: Division Facts 6, 7, 8, and 9	7
Practice 5: Division Facts 10, 11, and 12	8
Practice 6: Division Facts/Mixed Practice	9
Practice 7: Division Facts/Mixed Practice	10
Practice 8: Division Tables/Missing Factors	11
Practice 9: One-Digit Divisors/Two-Digit Dividends/Remainders	12
Practice 10: One-Digit Divisors/Two-Digit Dividends/Remainders	13
Practice 11: One-Digit Divisors/Three-Digit Dividends/No Remainders	14
Practice 12: One-Digit Divisors/Three-Digit Dividends/No Remainders/Zeroes in Quotients	15
Practice 13: One-Digit Divisors/Three-Digit Dividends/Remainders	16
Practice 14: One-Digit Divisors/Three-Digit Dividends/Remainders	17
Practice 15: One-Digit Divisors/Four-Digit Dividends/No Remainders	18
Practice 16: One-Digit Divisors/Four-Digit Dividends/Remainders	19
Practice 17: One-Digit Divisors/Four-Digit Dividends/Remainders	20
Practice 18: Divisibility with 5, 10, and 100	21
Practice 19: Divisibility with 2 and 4	22
Practice 20: Divisibility with 3 and 9	23
Practice 21: Divisibility with 20 and 25	24
Practice 22: Two-Digit Divisors (20, 30, 40, 50)/Three-Digit Dividends/No Remainders	25
Practice 23: Two-Digit Divisors (20 through 90)/Three-Digit Dividends/No Remainders	26
Practice 24: Two-Digit Divisors (20 through 90)/Three-Digit Dividends/Remainders	27
Practice 25: Two-Digit Divisors (20 through 90)/Four-Digit Dividends/Remainders	28
Practice 26: Two-Digit Divisors (20 through 90)/Five-Digit Dividends	29
Practice 27: Dividing with 25	30
Practice 28: Two-Digit Divisors (Not Ending in Zero)/Three-Digit Dividends	31
Practice 29: Two-Digit Divisors (Not Ending in Zero)/Three-Digit Dividends	32
Practice 30: Two-Digit Divisors (Not Ending in Zero)/Four-Digit Dividends	33
Practice 31: Two-Digit Divisors (Not Ending in Zero)/Four-Digit Dividends	34
Practice 32: Dividing with 100 and Multiples of 100	35
Practice 33: Dividing with Money/One-Digit Divisors	36
Practice 34: Dividing with Money/Two-Digit Divisors	37
Practice 35: Simple Word Problems with Division	38
Practice 36: Three-Digit Divisors	39
Test Practice 1	40
Test Practice 2	41
Test Practice 3	42
Test Practice 4	43
Test Practice 5	44
Test Practice 6	45
Answer Sheet	46
Answer Key	47

# Practice 2



**Directions:** Use the columns on the multiplication/division chart to help you find the missing numbers. (Go backwards.)

<b>1.</b>	<b>2.</b>	<b>3.</b>	<b>4.</b>	<b>5.</b>
96	120	60	132	144
88	110	55	121	132
80	100	50	110	120
72	90	45	99	108
64	80	40	88	96
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____

6. Which column has a zero in every number? \_\_\_\_\_

**Directions:** Use the multiplication/division chart to help you find the answers to these problems. The first two are done for you.

7. How many 8's can you subtract from 48?

$$48 - 8 - 8 - 8 - 8 - 8 - 8 = 0$$

*You can subtract six 8's from 48.*

---

8. How many 5's can you subtract from 30?

$$30 - 5 - 5 - 5 - 5 - 5 - 5 = 0$$

*You can subtract six 5's from 30.*

---

9. How many 6's can you subtract from 48?

$$48 - 6 - 6 - 6 - 6 - 6 - 6 - 6 = 0$$


---

10. How many 7's can you subtract from 42?

$$42 -$$


---

11. How many 3's can you subtract from 36?

$$36 -$$


---

12. How many 10's can you subtract from 100?

$$100 -$$


---

# Practice 35



**Directions:** Use your division skills to solve these word problems. Use your multiplication/division chart, if needed.

1. What is 219 divided by 3? \_\_\_\_\_
2. Her teacher asked Christina to divide 1,230 straws among the 30 members of the class for a science experiment. How many straws did each student receive? \_\_\_\_\_
3. Divide 963 by 9. \_\_\_\_\_
4. Alyssa had \$29.25 in her piggy bank. All of the money was in quarters (25¢). How many quarters did she have in her piggy bank? \_\_\_\_\_
5. The divisor is 29. The dividend is 986. What is the quotient? \_\_\_\_\_
6. What is the quotient when 1,024 is divided by 4? \_\_\_\_\_
7. Divide 2,340 by 20. \_\_\_\_\_
8. His science teacher asked James to pass out 510 milliliters of soap in 30 milliliter containers to each student. How many students received soap? \_\_\_\_\_
9. What is 1,333 divided by 31? \_\_\_\_\_
10. Find the quotient: 8,088 divided by 40. \_\_\_\_\_
11. Robert had to split a jar of 3,275 pieces of candy corn among 25 children at a Halloween party. How many candy corn pieces did each child receive? \_\_\_\_\_
12. What is 9,570 divided by 33? \_\_\_\_\_



# Table of Contents

<b>Introduction</b> . . . . .	3	Multiplying a Fraction by a Whole Number . . . . .	61
<b>How to Use This Book</b> . . . . .	4	<b>Decimals</b>	
<b>Numbers</b>		Decimal Notation . . . . .	65
Factors . . . . .	5	Comparing Decimals . . . . .	69
Prime Numbers & Composite Numbers . . . . .	9	<b>Measurement</b>	
Number Patterns . . . . .	13	Conversions . . . . .	73
Rounding Numbers . . . . .	17	<b>Data</b>	
Comparing Numbers . . . . .	21	Line Plots . . . . .	77
<b>Operations in Base Ten</b>		<b>Geometry</b>	
Adding Multi-Digit Numbers . . . . .	25	Lines, Segments, and Rays . . . . .	81
Subtracting Multi-Digit Numbers . . . . .	29	Angles . . . . .	85
Multiplying by One-Digit Numbers . . . . .	33	Classifying 2-D Figures . . . . .	89
Multiplying by Two-Digit Numbers . . . . .	37	Lines of Symmetry . . . . .	93
Dividing Large Numbers . . . . .	41	<b>Word Problems</b>	
<b>Fractions</b>		Word Problems: Multi-Step . . . . .	97
Equivalent Fractions . . . . .	45	Word Problems: Fractions . . . . .	101
Comparing Fractions . . . . .	49	Word Problems: Measurement & Money . . . . .	105
Adding Mixed Numbers with Like Denominators . . . . .	53	<b>Answer Key</b> . . . . .	109
Subtracting Mixed Numbers with Like Denominators . . . . .	57		



## Fractions

Name: \_\_\_\_\_

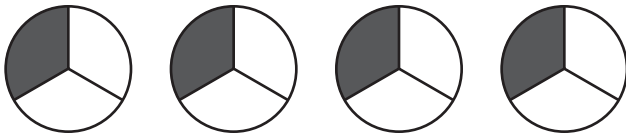
### Multiplying a Fraction by a Whole Number

We know that multiplication can be represented as groups of objects times the number of objects in those groups.

$$5 \times 2 = 10$$


We can also multiply fractions by whole numbers using visual models to show groups of fractions.

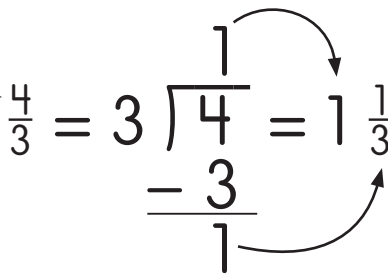
For example, we can represent  $4 \times \frac{1}{3}$  as 4 groups of  $\frac{1}{3}$ .



$$4 \times \frac{1}{3} = \frac{4}{1} \times \frac{1}{3} = \frac{4}{3}$$

Since the numerator is bigger than the denominator, this is an improper fraction. We can write it as a mixed number.

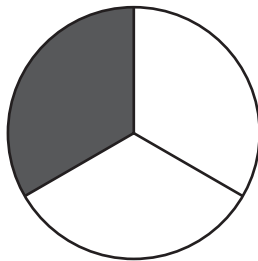
We can use division to change the improper fraction to a mixed number.

$$\frac{4}{3} = 3 \overline{)4} = 1 \frac{1}{3}$$


We show the remainder as a fraction. The remainder becomes the numerator and the divisor becomes the denominator.



1



$\frac{1}{3}$

## Fractions

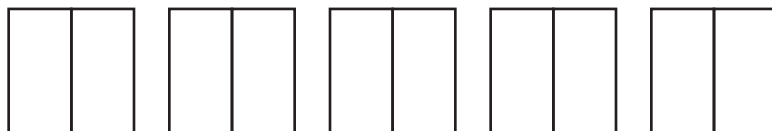
Name: \_\_\_\_\_

**Multiplying a Fraction by a Whole Number**

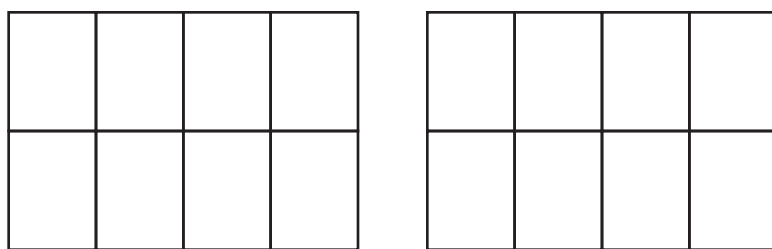
Work with your partner to solve these practice problems.

Shade the visual models to solve each problem. Write improper fractions as mixed numbers.

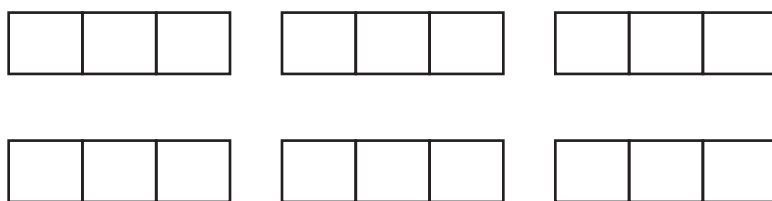
1.  $5 \times \frac{1}{2} =$  \_\_\_\_\_



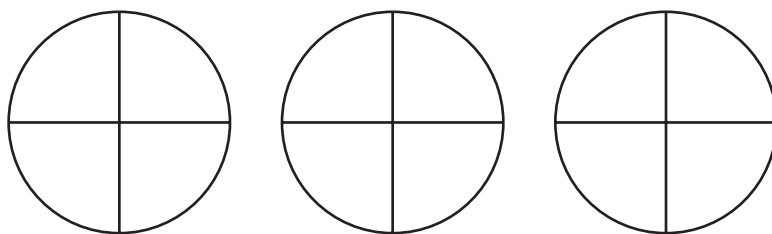
2.  $2 \times \frac{1}{8} =$  \_\_\_\_\_



3.  $6 \times \frac{1}{3} =$  \_\_\_\_\_



4.  $3 \times \frac{3}{4} =$  \_\_\_\_\_



## Fractions

Name: \_\_\_\_\_

**Multiplying a Fraction by a Whole Number**

Focus on what you learned. Find the answers.

Draw a visual model to solve each problem. Write improper fractions as mixed numbers.

1.  $8 \times \frac{1}{3} =$  \_\_\_\_\_

2.  $5 \times \frac{2}{4} =$  \_\_\_\_\_

3.  $6 \times \frac{3}{5} =$  \_\_\_\_\_

4.  $3 \times \frac{1}{8} =$  \_\_\_\_\_

Name: \_\_\_\_\_

## Multiplying a Fraction by a Whole Number

Think about multiplying fractions by whole numbers. Write about what you learned.

1. How do visual models help you multiply fractions by whole numbers?

---

---

---

---

2. What is an improper fraction?

---

---

---

3. One important thing to remember when multiplying a fraction by a whole number is

---

---

---