

# Grade 6

## Math

## Workbook



**Oak Meadow**

Oak Meadow, Inc.  
Post Office Box 1346  
Brattleboro, Vermont 05302-1346  
[oakmeadow.com](http://oakmeadow.com)

## Lesson

# 1

## Skills Check

---

1. 
$$\begin{array}{r} 76 \\ \times 5 \\ \hline \end{array}$$

2. 
$$\begin{array}{r} 734 \\ 106 \\ 25 \\ + 81 \\ \hline \end{array}$$

3. 
$$\begin{array}{r} 5,164 \\ -1,497 \\ \hline \end{array}$$

4. 
$$\begin{array}{r} 638 \\ 104 \\ + 29 \\ \hline \end{array}$$

5. 
$$\begin{array}{r} 9,003 \\ - 834 \\ \hline \end{array}$$

6. Sam went on a cross-country trip in his car. The first day he drove 217 miles, the second day he went 329 miles, the third day he traveled 314 miles, and the fourth day he drove 215 miles. How many miles did he travel in the first four days of his trip?
7. Jim went on a trip to Europe and took \$1,500 with him. After one week, he counted his money and found he had \$812 left. How much money had he spent the first week?

## Lesson

# 1

## New Skills Practice: Multiplication and Division of Whole Numbers

---

1. 
$$\begin{array}{r} 43 \\ \times 15 \\ \hline \end{array}$$

2. 
$$\begin{array}{r} 34 \\ \times 7 \\ \hline \end{array}$$

3. 
$$\begin{array}{r} 62 \\ \times 6 \\ \hline \end{array}$$

4. 
$$\begin{array}{r} 75 \\ \times 4 \\ \hline \end{array}$$

5. 
$$\begin{array}{r} 6,751 \\ \times 301 \\ \hline \end{array}$$

6.  $3,173 \times 1,000$

7. 
$$\begin{array}{r} 5,074 \\ \times 136 \\ \hline \end{array}$$

8. 
$$6 \overline{)786}$$

9.  $950 \div 5$



**10.**  $4 \overline{)92}$

**11.**  $2 \overline{)821}$

**12.**  $429 \div 7$

**13.**  $8 \overline{)989}$

## Lesson

# 1

## Test

---

1. 
$$\begin{array}{r} 8,035 \\ - 746 \\ \hline \end{array}$$

2. 
$$\begin{array}{r} 524 \\ \times 637 \\ \hline \end{array}$$

3. 
$$\begin{array}{r} 182 \\ + 7,608 \\ \hline \end{array}$$

4. 
$$4 \overline{)98}$$

5. 
$$\begin{array}{r} 5,063 \\ \times 247 \\ \hline \end{array}$$

6. 
$$\begin{array}{r} 3,176 \\ - 490 \\ \hline \end{array}$$

7. 
$$\begin{array}{r} 608 \\ + 753 \\ \hline \end{array}$$

8. 
$$2 \overline{)610}$$

9.  $47 \times 3,000$

**10.**  $6 \overline{)792}$

**11.** 
$$\begin{array}{r} 1,248 \\ + 237 \\ \hline \end{array}$$

**12.** 
$$\begin{array}{r} 9,348 \\ - 479 \\ \hline \end{array}$$

**13.** Alyssa earns \$25 a week babysitting. How much money can she earn in 4 weeks?

**14.** Dean's car can travel 21 miles on a gallon of gas. If his gas tank holds 15 gallons, how far can he travel on a full tank of gas?

**15.** Putney Equipment Company sold \$7,106 worth of generators in October. In September their generator sales were \$5,418. How much more were their generator sales in October than in September?

- 16.** Jill's father is a pilot. The airplane he flies can carry 396 passengers. If each passenger is allowed to take 60 pounds of luggage, how many total pounds can the plane carry in luggage?

## Learning Checklist

You will find a checklist at the end of each test that will help you keep track of the skills you are working on: what you need help with, what you can do on your own, and what feels easy. Take a few moments to fill it out after you have finished your test for each lesson. You or your parent can also add notes about what you are working on or have questions about.

Please remember that these skills continue to develop over time so don't worry if you can't do all of them yet. The main goal is to be aware of which skills you need to focus on.

SKILLS	Developing	Consistent	Competent	Notes
Demonstrate basic skills using the four processes (addition, subtraction, multiplication, and division)				
Multiply multi-digit whole numbers				
Multiply by multiples of 10, 100, and 1,000				
Perform long division with a single-digit divisor				
Express a remainder in division as a fraction				
Translate word problems into numeric equations using the four processes				
Use unit labels and complete sentences when writing solutions to word problems				
Check work using inverse operations				

## Lesson

# 2

## Skills Check

---

1.  $349 \times 100$

2. 
$$\begin{array}{r} 675 \\ \times 84 \\ \hline \end{array}$$

3. 
$$\begin{array}{r} 83 \\ \times 97 \\ \hline \end{array}$$

4. 
$$\begin{array}{r} 238 \\ \times 63 \\ \hline \end{array}$$

5. 
$$\begin{array}{r} 6,135 \\ - 247 \\ \hline \end{array}$$

6. 
$$\begin{array}{r} 3,169 \\ + 1,075 \\ \hline \end{array}$$

7. 
$$3 \overline{)749}$$



## Lesson

# 2

## New Skills Practice: Two-Digit Divisors, and Estimating with Large Divisors

---

1.  $20 \overline{)782}$

2.  $30 \overline{)635}$

3.  $307 \div 20$

4.  $7,418 \div 62$

5.  $26 \overline{)7,048}$

6.  $63 \overline{)8,325}$

7.  $4,210 \div 18$

8.  $34 \overline{)6,995}$

9.  $9,061 \div 45$

**10.**  $36 \overline{)6,084}$

**11.**  $32 \overline{)5,897}$

**12.**  $27 \overline{)9,018}$

# Lesson

# 2

## Test

---

1. 
$$\begin{array}{r} 3,406 \\ \times 581 \\ \hline \end{array}$$

2. 
$$20 \overline{)4,095}$$

3. 
$$15 \overline{)385}$$

4. 
$$\begin{array}{r} 376 \\ \times 534 \\ \hline \end{array}$$

5. 
$$\begin{array}{r} 6,004 \\ - 2,387 \\ \hline \end{array}$$

6. 
$$5 \overline{)782}$$

7. 
$$\begin{array}{r} 804 \\ \times 397 \\ \hline \end{array}$$

8. 
$$25 \overline{)3,048}$$

9. 
$$\begin{array}{r} 4,064 \\ \times 583 \\ \hline \end{array}$$



10.  $18 \overline{)396}$

11. 
$$\begin{array}{r} 509 \\ \times 38 \\ \hline \end{array}$$

12. Joan’s father is 42 years old today. How many *days* old is he? (Note: don’t add any days for leap years; just count each year as 365 days.)

# Learning Checklist

Fill out this checklist to keep track of the skills you are working on. You can also add notes to help your parent or teacher understand how to help you (or your parent might want to add notes in this space).

Please remember that these skills continue to develop over time so don’t worry if you can’t do all of them yet. The main goal is to be aware of which skills you need to focus on.

SKILLS	Developing	Consistent	Competent	Notes
Perform long division with multi-digit divisors				
Use estimating when solving long division with multi-digit divisors				

## Lesson

# 6

## Skills Check

---

Reduce all fractions in answers to lowest terms.

1.  $74 \overline{)7,992}$

2. 
$$\begin{array}{r} 3\frac{5}{8} \\ + 2\frac{1}{8} \\ \hline \end{array}$$

3.  $\frac{7}{8} - \frac{3}{8}$

4. 
$$\begin{array}{r} 9\frac{9}{10} \\ - 5\frac{4}{10} \\ \hline \end{array}$$

5.  $4 \overline{)1,309}$

6.  $50 \overline{)6,100}$

$$\begin{array}{r} 7. \quad 7,241 \\ \times \quad 503 \\ \hline \end{array}$$

$$\begin{array}{r} 8. \quad \frac{9}{15} \\ + \frac{3}{15} \\ \hline \end{array}$$

$$9. \quad \frac{3}{12} + \frac{5}{12}$$

$$10. \quad 12 \overline{)2,187}$$

$$\begin{array}{r} 11. \quad \frac{11}{16} \\ - \frac{5}{16} \\ \hline \end{array}$$

$$\begin{array}{r} 12. \quad 3,007 \\ \times \quad 386 \\ \hline \end{array}$$

## Lesson

# 6

## New Skills Practice: Lowest Common Denominator (LCD) in Mixed Number Addition and Subtraction

---

Reduce answers to lowest terms.

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

2. 
$$\begin{array}{r} \frac{3}{4} \\ + \frac{1}{8} \\ \hline \end{array}$$

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

4. 
$$\begin{array}{r} \frac{3}{8} \\ + \frac{4}{16} \\ \hline \end{array}$$

5.  $\frac{3}{4} + \frac{1}{6}$

6. 
$$\begin{array}{r} \frac{1}{4} \\ - \frac{1}{10} \\ \hline \end{array}$$

Find the lowest common denominator and solve.

$$\begin{array}{r} 7. \quad \frac{3}{8} \\ - \frac{1}{12} \\ \hline \end{array}$$

$$\begin{array}{r} 8. \quad \frac{5}{6} \\ - \frac{2}{9} \\ \hline \end{array}$$

$$\begin{array}{r} 9. \quad 13\frac{1}{2} \\ + 7\frac{3}{6} \\ \hline \end{array}$$

$$10. \quad 16\frac{8}{12} - 5\frac{2}{8}$$

$$11. \quad 6\frac{5}{12} + 5\frac{7}{8}$$

$$12. \quad 13\frac{5}{6} - 9\frac{1}{4}$$

$$13. \quad 17\frac{1}{2} - 9\frac{4}{5}$$

$$\begin{array}{r} 14. \quad 8\frac{1}{9} \\ - 3\frac{2}{3} \\ \hline \end{array}$$

$$15. \quad 25\frac{1}{6} - 16\frac{3}{4}$$

# Lesson

# 6

## Test

---

Reduce all fractions in answers to lowest terms.

$$\begin{array}{r} 1. \quad 9\frac{3}{4} \\ - 5\frac{2}{3} \\ \hline \end{array}$$

$$2. \quad 7\frac{1}{6} + 8\frac{3}{4}$$

$$\begin{array}{r} 3. \quad 9\frac{1}{2} \\ - 4\frac{1}{6} \\ \hline \end{array}$$

$$4. \quad 7 - \frac{2}{3}$$

$$\begin{array}{r} 5. \quad 12 \\ + 6\frac{6}{9} \\ \hline \end{array}$$

$$6. \quad 4 \overline{)8,158}$$

$$\begin{array}{r} 7. \quad 39 \\ - 7\frac{7}{8} \\ \hline \end{array}$$

$$\begin{array}{r} 8. \quad 2,905 \\ \times 306 \\ \hline \end{array}$$

$$\begin{array}{r} 9. \quad 11\frac{5}{6} \\ + 3\frac{1}{2} \\ \hline \end{array}$$

Reduce all fractions in answers to lowest terms.

**10.**  $27\frac{1}{6} - 13\frac{1}{4}$

**11.**  $14\frac{5}{7}$   
 $- 5\frac{2}{7}$   
\_\_\_\_\_

**12.**  $7\frac{1}{6}$   
 $+ 3\frac{3}{6}$   
\_\_\_\_\_

**13.**  $42\frac{1}{5}$   
 $+ 17\frac{2}{3}$   
\_\_\_\_\_

**14.**  $6\frac{3}{8} + 12\frac{1}{8}$

- 15.** Sharla is making two loaves of banana bread. She needs 8 cups of flour, but she only has  $5\frac{1}{4}$  cups. How much more flour does she need?

- 16.** Jackson made a cherry pie and cut it into 8 pieces. He ate 2 pieces and his sister ate 3 pieces. What fraction of the pie did they eat together?

# Learning Checklist

SKILLS	Developing	Consistent	Competent	Notes
Identify common denominator for two fractions				
Identify lowest common denominator				
Subtract mixed numbers using LCDs and regrouping				



## Lesson

# 7

## Skills Check

---

Reduce all fractions in answers to lowest terms.

1.  $\frac{1}{3} + \frac{3}{4}$

2.  $18\frac{3}{8} + 12\frac{1}{8}$

3.  $10 - \frac{4}{6}$

4.  $9 \overline{)1,218}$

5.  $\frac{2}{3} + \frac{5}{9}$

6.  $\begin{array}{r} 5 \\ + \frac{8}{12} \\ \hline \end{array}$

7.  $\begin{array}{r} 21\frac{11}{12} \\ - 6\frac{7}{12} \\ \hline \end{array}$

8.  $\begin{array}{r} 509 \\ \times 468 \\ \hline \end{array}$

9.  $\begin{array}{r} \frac{2}{4} \\ - \frac{1}{6} \\ \hline \end{array}$

## Lesson

# 7

## New Skills Practice: Multiplying Using Simple Fractions and Mixed Numbers, Fractions in Word Problems

---

Multiply and reduce to lowest terms.

1.  $\frac{3}{4} \times \frac{1}{2}$

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

3.  $\frac{2}{3} \times \frac{4}{5}$

4.  $\frac{5}{6} \times \frac{1}{4}$

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

6.  $\frac{7}{10} \times \frac{1}{2}$

7.  $5 \times \frac{1}{2}$

8.  $\frac{2}{3}$  of 8

9.  $10 \times \frac{3}{4}$

**10.**  $1\frac{1}{2} \times \frac{1}{4}$

**11.**  $\frac{3}{10} \times 2\frac{1}{2}$

**12.**  $4\frac{2}{5} \times \frac{2}{6}$

**13.**  $1\frac{3}{5} \times \frac{1}{3}$

**14.**  $\frac{5}{8} \times 2\frac{1}{3}$

**15.**  $\frac{1}{6} \times 3\frac{2}{3}$

**16.**  $2\frac{1}{3} \times 2\frac{3}{5}$

**17.**  $2\frac{2}{5} \times 1\frac{1}{3}$

**18.**  $2\frac{2}{9} \times 4\frac{1}{2}$

# Lesson

# 7

# Test

---

Reduce all fractions to lowest terms.

1. 
$$\begin{array}{r} 12 \\ + 3\frac{3}{6} \\ \hline \end{array}$$

2. 
$$21 \overline{)4,564}$$

3.  $\frac{1}{3}$  of 28

4. 
$$\begin{array}{r} 9\frac{2}{9} \\ - 3\frac{1}{3} \\ \hline \end{array}$$

5.  $1\frac{3}{4} \times 2\frac{2}{3}$

6.  $16 - \frac{2}{4}$

7.  $\frac{1}{2} \times 1\frac{5}{8}$

8.  $18\frac{3}{4} + 9\frac{5}{6}$

9. 
$$\begin{array}{r} 7,006 \\ \times 482 \\ \hline \end{array}$$

**10.**  $2\frac{5}{6} \times 3\frac{1}{4}$

**11.**  $24 \times \frac{3}{4}$

**12.** 
$$\begin{array}{r} 19 \\ - 11\frac{2}{8} \\ \hline \end{array}$$

**13.** 
$$\begin{array}{r} 9\frac{3}{5} \\ - 5\frac{1}{2} \\ \hline \end{array}$$

**14.**  $\frac{2}{3} \times \frac{5}{6}$

**15.**  $1\frac{3}{4} \times \frac{1}{3}$

**16.** 
$$\begin{array}{r} 19\frac{5}{6} \\ + 5\frac{1}{3} \\ \hline \end{array}$$

- 17.** Joe's family had a big party for his 21st birthday. There were 33 people at the party, and  $\frac{2}{3}$  of them were his friends from college. How many college friends were at Joe's party?
- 18.** Todd is driving at 60 miles per hour. If he continues driving at that rate, how many miles will he travel in  $\frac{3}{4}$  of an hour?
- 19.** Jamie and Earl earned \$188 mowing lawns together. If they split their earnings evenly, how much will each one receive?
- 20.** Mrs. Johnson made an apple pie and divided it into 8 equal pieces. Mrs. Johnson ate 1 piece, Roger ate 2 pieces, and Shana ate 1 piece. What fraction of the pie did they all eat?

# Learning Checklist

SKILLS	Developing	Consistent	Competent	Notes
Multiply simple fractions				
Multiply fractions and whole numbers				
Translate multiplication word problems involving fractions into numeric equations				
Multiply using mixed numbers				