

CHAPTER  
3

# Whole Number Multiplication and Division

## Lesson 3.1 Multiplying by a 1-Digit Number

Multiply 2,658 by 7 and find the missing numbers.

1. Step 1  $8 \text{ ones} \times 7 = \underline{\hspace{2cm}} \text{ ones}$

$= \underline{\hspace{2cm}} \text{ tens } \underline{\hspace{2cm}} \text{ ones}$

2. Step 2  $\underline{\hspace{2cm}} \text{ tens} \times 7 = \underline{\hspace{2cm}} \text{ tens}$

$= \underline{\hspace{2cm}} \text{ hundreds } \underline{\hspace{2cm}} \text{ tens}$

3. Step 3  $\underline{\hspace{2cm}} \text{ hundreds} \times 7 = \underline{\hspace{2cm}} \text{ hundreds}$

$= \underline{\hspace{2cm}} \text{ thousands } \underline{\hspace{2cm}} \text{ hundreds}$

4. Step 4  $\underline{\hspace{2cm}} \text{ thousands} \times 7 = \underline{\hspace{2cm}} \text{ thousands}$

$= \underline{\hspace{2cm}} \text{ ten thousand } \underline{\hspace{2cm}} \text{ thousands}$

5.

|       |    |   |   |   |  |
|-------|----|---|---|---|--|
|       | 2, | 6 | 5 | 8 |  |
| ×     |    |   |   | 7 |  |
| <hr/> |    |   |   |   |  |
|       |    |   |   |   |  |
|       |    |   |   |   |  |
|       |    |   |   |   |  |
|       |    |   |   |   |  |
| <hr/> |    |   |   |   |  |
|       |    |   |   |   |  |

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

Date: \_\_\_\_\_

**Find each product.**

**6.**

$$\begin{array}{r} 495 \\ \times \quad 8 \\ \hline \end{array}$$

,

**7.**

$$\begin{array}{r} 898 \\ \times \quad 4 \\ \hline \end{array}$$

,

**8.**

$$\begin{array}{r} 927 \\ \times \quad 9 \\ \hline \end{array}$$

,

**9.**

$$\begin{array}{r} 993 \\ \times \quad 5 \\ \hline \end{array}$$

,

**10.**

$$\begin{array}{r} 3,589 \\ \times \quad 3 \\ \hline \end{array}$$

,

**11.**

$$\begin{array}{r} 2,678 \\ \times \quad 6 \\ \hline \end{array}$$

,

**12.**

$$\begin{array}{r} 7,231 \\ \times \quad 3 \\ \hline \end{array}$$

,

**13.**

$$\begin{array}{r} 4,963 \\ \times \quad 7 \\ \hline \end{array}$$

,

**14.**

$$\begin{array}{r} 5,497 \\ \times \quad 8 \\ \hline \end{array}$$

,

**15.**

$$\begin{array}{r} 4,836 \\ \times \quad 7 \\ \hline \end{array}$$

,

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

Date: \_\_\_\_\_

## Lesson 3.2 Multiplying by a 2-Digit Number

Write the missing numbers.

|   |   |
|---|---|
| <b>1.</b> $48 \times 10 = \underline{\hspace{2cm}}$   | <b>2.</b> $89 \times 10 = \underline{\hspace{2cm}}$   |
| <b>3.</b> $23 \times 40 = 23 \times \underline{\hspace{1cm}} \text{ tens}$<br>$= \underline{\hspace{2cm}} \text{ tens}$<br>$= \underline{\hspace{2cm}}$   | <b>4.</b> $35 \times 30 = 35 \times \underline{\hspace{1cm}} \text{ tens}$<br>$= \underline{\hspace{2cm}} \text{ tens}$<br>$= \underline{\hspace{2cm}}$   |
| <b>5.</b> $419 \times 50 = 419 \times \underline{\hspace{1cm}} \text{ tens}$<br>$= \underline{\hspace{2cm}} \text{ tens}$<br>$= \underline{\hspace{2cm}}$ | <b>6.</b> $627 \times 20 = 627 \times \underline{\hspace{1cm}} \text{ tens}$<br>$= \underline{\hspace{2cm}} \text{ tens}$<br>$= \underline{\hspace{2cm}}$ |
| <b>7.</b> $536 \times 60 = 536 \times \underline{\hspace{1cm}} \times 10$<br>$= \underline{\hspace{2cm}} \times 10$<br>$= \underline{\hspace{2cm}}$       | <b>8.</b> $648 \times 60 = 648 \times \underline{\hspace{1cm}} \times 10$<br>$= \underline{\hspace{2cm}} \times 10$<br>$= \underline{\hspace{2cm}}$       |

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

Date: \_\_\_\_\_

**Find each product.**

**9.**  $87 \times 7 =$  \_\_\_\_\_

$87 \times 70 =$  \_\_\_\_\_

**10.**  $96 \times 7 =$  \_\_\_\_\_

$96 \times 70 =$  \_\_\_\_\_

**11.**  $356 \times 8 =$  \_\_\_\_\_

$356 \times 80 =$  \_\_\_\_\_

**12.**  $267 \times 9 =$  \_\_\_\_\_

$267 \times 90 =$  \_\_\_\_\_

**Estimate each product.**

*Example*

$52 \times 23$  is about  $\underline{50} \times \underline{20}$ .

Estimate:  $\underline{50} \times \underline{20} = 1,000$

**13.**  $87 \times 39$  is about \_\_\_\_\_  $\times$  \_\_\_\_\_.

Estimate: \_\_\_\_\_

**14.**  $369 \times 47$  is about \_\_\_\_\_  $\times$  \_\_\_\_\_.

Estimate: \_\_\_\_\_

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

Date: \_\_\_\_\_

**Multiply. Then estimate to check that your answers are reasonable.**

**15.**

$$\begin{array}{r} 98 \\ \times 76 \\ \hline \end{array}$$

**16.**

$$\begin{array}{r} 54 \\ \times 97 \\ \hline \end{array}$$

**17.**

$$\begin{array}{r} 364 \\ \times 29 \\ \hline \end{array}$$

**18.**

$$\begin{array}{r} 528 \\ \times 46 \\ \hline \end{array}$$

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

Date: \_\_\_\_\_

**Multiply. Then estimate to check that your answers are reasonable.**

**19.**

$$\begin{array}{r} 392 \\ \times 30 \\ \hline \end{array}$$

**20.**

$$\begin{array}{r} 439 \\ \times 72 \\ \hline \end{array}$$

**21.**

$$\begin{array}{r} 734 \\ \times 86 \\ \hline \end{array}$$

**22.**

$$\begin{array}{r} 856 \\ \times 94 \\ \hline \end{array}$$

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

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## Lesson 3.3 Modeling Division with Regrouping

Complete the steps.

1.

$$\begin{array}{r} \square \\ 5 \overline{) 745} \\ \square \square \square \\ \hline \end{array}$$

$$\begin{array}{r} \square \\ 5 \overline{) 745} \\ \square \square \square \\ \hline \square \square \square \end{array}$$

$$\begin{array}{r} \square \square \\ 5 \overline{) 745} \\ \square \square \square \\ \hline \square 4 \square \\ \square \square \square \\ \hline \square \square \end{array}$$

$$\begin{array}{r} \square \square \square \\ 5 \overline{) 745} \\ \square \square \square \\ \hline \square 4 \square \\ \square \square \square \\ \hline \square 5 \\ \square \square \\ \hline \square \end{array}$$

2.

$$\begin{array}{r} \square \\ 6 \overline{) 984} \\ \square \square \square \\ \hline \end{array}$$

$$\begin{array}{r} \square \\ 6 \overline{) 984} \\ \square \square \square \\ \hline \square \square \square \end{array}$$

$$\begin{array}{r} \square \square \\ 6 \overline{) 984} \\ \square \square \square \\ \hline \square 8 \square \\ \square \square \square \\ \hline \square \square \end{array}$$

$$\begin{array}{r} \square \square \square \\ 6 \overline{) 984} \\ \square \square \square \\ \hline \square 8 \square \\ \square \square \square \\ \hline \square 4 \\ \square \square \\ \hline \square \end{array}$$

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

Date: \_\_\_\_\_

**Divide.**

3.  $2 \overline{) 728}$

4.  $3 \overline{) 735}$

5.  $4 \overline{) 948}$

6.  $5 \overline{) 930}$

7.  $6 \overline{) 654}$

8.  $7 \overline{) 973}$

9.  $8 \overline{) 984}$

10.  $9 \overline{) 954}$



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

Date: \_\_\_\_\_

## Lesson 3.4 Dividing by a 1-Digit Number

Fill in the blanks to find each quotient.

1.  $6,400 \div 8 =$  \_\_\_\_\_ hundreds  $\div 8$   
 $=$  \_\_\_\_\_ hundreds  
 $=$  \_\_\_\_\_

2.  $6,300 \div 9 =$  \_\_\_\_\_ hundreds  $\div 9$   
 $=$  \_\_\_\_\_ hundreds  
 $=$  \_\_\_\_\_

3.  $9,000 \div 3 =$  \_\_\_\_\_ thousands  $\div 3$   
 $=$  \_\_\_\_\_ thousands  
 $=$  \_\_\_\_\_

Estimate each quotient.

4.  $78 \div 4$  is about \_\_\_\_\_  $\div 4$ . Estimate: \_\_\_\_\_

5.  $397 \div 5$  is about \_\_\_\_\_  $\div 5$ . Estimate: \_\_\_\_\_

6.  $7,425 \div 5$  is about \_\_\_\_\_  $\div 5$ . Estimate: \_\_\_\_\_

7.  $6,726 \div 6$  is about \_\_\_\_\_  $\div 6$ . Estimate: \_\_\_\_\_

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

Date: \_\_\_\_\_

**Divide.**

8.  $4 \overline{) 5,052}$

9.  $6 \overline{) 6,078}$

10.  $7 \overline{) 1,988}$

11.  $9 \overline{) 5,058}$

12.  $8 \overline{) 3,976}$

13.  $5 \overline{) 4,840}$

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

Date: \_\_\_\_\_

**Find each quotient. Then estimate to check that your answers are reasonable.**

**14.**  $1,748 \div 7 =$  \_\_\_\_\_ R \_\_\_\_\_

**15.**  $3,871 \div 4 =$  \_\_\_\_\_ R \_\_\_\_\_

**16.**  $3,014 \div 8 =$  \_\_\_\_\_ R \_\_\_\_\_

**17.**  $2,518 \div 9 =$  \_\_\_\_\_ R \_\_\_\_\_

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Date: \_\_\_\_\_

**Find each quotient. Then estimate to check that your answers are reasonable.**

**18.**  $5,453 \div 9 =$  \_\_\_\_\_ R \_\_\_\_\_

**19.**  $7,218 \div 8 =$  \_\_\_\_\_ R \_\_\_\_\_

**20.**  $6,499 \div 7 =$  \_\_\_\_\_ R \_\_\_\_\_

**21.**  $2,781 \div 5 =$  \_\_\_\_\_ R \_\_\_\_\_

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

Date: \_\_\_\_\_

## Lesson 3.5 Real-World Problems: Multiplication and Division

1. A digital camera costs \$699. A retailer sells 38 cameras. How much does he collect altogether?



2. A bakery sells 369 banana muffins each day. It sells 4 times as many blueberry muffins as banana muffins each day. How many blueberry muffins are sold every day?



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

**Date:** \_\_\_\_\_

**3.** A factory produces 1,899 toy cars each day. How many toy cars does it produce in 7 days?

**4.** Ms. Marquez divides 3,438 beads equally among 6 groups of students for a crafts project. How many beads does each group have?

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

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5. 2,255 stamps are divided equally among 6 post offices.

a. How many stamps does each post office receive?

b. How many stamps are left over?

6. Each pair of in-line skates costs \$56.

a. How much does a store have to pay for 39 pairs of in-line skates?

b. A store sells each pair of in-line skates for \$72. What is the profit that the store makes on the 39 pairs of in-line skates?

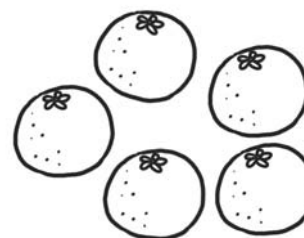


Name: \_\_\_\_\_

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7. Hannah gave \$68 to charity. Hannah's mother gave 25 times as much as Hannah. How much did they give altogether?

8. A fruit seller has 2,400 oranges. He throws away 15 rotten oranges and packs the remainder equally into 9 boxes. How many oranges are in each box?





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

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- 9.** There are 4 times as many children as adults at a theater.  
There are 475 adults. How many people are at the theater altogether?

- 10.** A nature club has 37 members. Each member receives 15 fish to put into an aquarium. If 20 of the total number of fish are put into a fishbowl instead, how many fish are put into the aquarium?

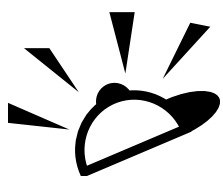
**Name:** \_\_\_\_\_

**Date:** \_\_\_\_\_

- 11.** Mr. Joseph's salary is \$3,650. He spends \$1,610 on rent. He divides the rest of his salary into 3 parts for his other monthly expenses. How much money is in each part?
- 12.** Diana mixes 1,543 milliliters of orange concentrate with 932 milliliters of water to make orange juice. She then pours the mixture equally into 9 glasses. How much orange juice is in each glass?

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

Date: \_\_\_\_\_



## Put on Your Thinking Cap!

- 1.** Sarah has 275 red beads and 3 times as many blue beads. She uses a total of 156 beads to make a bracelet. How many beads are left?
  
  
  
  
  
  
  
  
  
  
- 2.** Factory A produces 420 footballs a day. Factory B produces 90 fewer footballs than Factory A each day. How many footballs do the two factories produce in 28 days?
  
  
  
  
  
  
  
  
  
  
- 3.** James and Sam saved \$392 altogether. Sam had 3 times as much money as James. Sam spends \$38 on a pair of shoes. How much money does Sam have now?

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

**Date:** \_\_\_\_\_

- 4.** Mr. Roberts inherits some money. He keeps \$1,800 for himself, gives \$980 to his wife, and divides the rest among his 6 children. Each of his children receives \$89. How much did Mr. Roberts inherit?
  
  
  
  
  
  
  
  
  
  
- 5.** Mrs. Rodin buys a table and 6 chairs for \$1,233. The table costs \$750 more than each chair. How much does Mrs. Rodin pay for the 6 chairs?
  
  
  
  
  
  
  
  
  
  
- 6.** Ms. Rao buys a computer, a printer, and a scanner for \$2,543. The computer costs \$1,502 more than the printer. The printer costs \$123 more than the scanner. How much does Ms. Rao pay for the computer?

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

Date: \_\_\_\_\_

7. Use each of the digits 2, 4, 7, 8, and 9 only once.  
Arrange the digits in these boxes to get
- a. the greatest possible product.

$$\begin{array}{r} \square \square \square \\ \times \quad \square \square \\ \hline \end{array}$$

- b. the least possible product.

$$\begin{array}{r} \square \square \square \\ \times \quad \square \square \\ \hline \end{array}$$

8. Mr. Garcia's age this year is a multiple of 7. In 3 years, his age will be a multiple of 5. He is more than 20 years but less than 80 years old.  
How old will Mr. Garcia be in 6 years?

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

**Date:** \_\_\_\_\_

- 9.** At a bicycle shop, a bicycle costs \$49 and a tricycle costs \$27.  
An after-school club buys bicycles and tricycles with a total of 39 wheels.  
The club buys 2 more bicycles than tricycles.
- a.** How many bicycles does the club buy?

- b.** How much money does the club pay for the bicycles?