

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.

- Step 1** 8 ones $\times 7 =$ _____ ones
= _____ tens _____ ones
- Step 2** _____ tens $\times 7 =$ _____ tens
= _____ hundreds _____ tens
- Step 3** _____ hundreds $\times 7 =$ _____ hundreds
= _____ thousands _____ hundreds
- Step 4** _____ thousands $\times 7 =$ _____ thousands
= _____ ten thousand _____ thousands

5.

	2,	6	5	8	
×				7	

Name: _____

Date: _____

Find each product.

6.

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

,

7.

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

,

8.

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

,

9.

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

,

10.

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

,

11.

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

,

12.

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

,

13.

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

,

14.

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

,

15.

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

,

Name: _____

Date: _____

Lesson 3.2 Multiplying by a 2-Digit Number

Write the missing numbers.

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

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

52×23 is about 50×20 .

Estimate: $50 \times 20 = 1,000$

13. 87×39 is about _____ \times _____.

Estimate: _____

14. 369×47 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: _____

Date: _____

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 _____

Name: _____

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: _____

Date: _____

- 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?

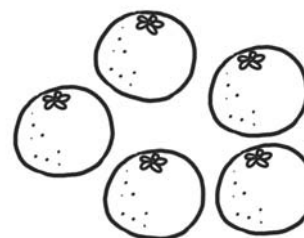


Name: _____

Date: _____

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: _____

Date: _____

- 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?

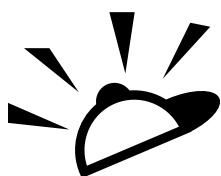
Name: _____

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?