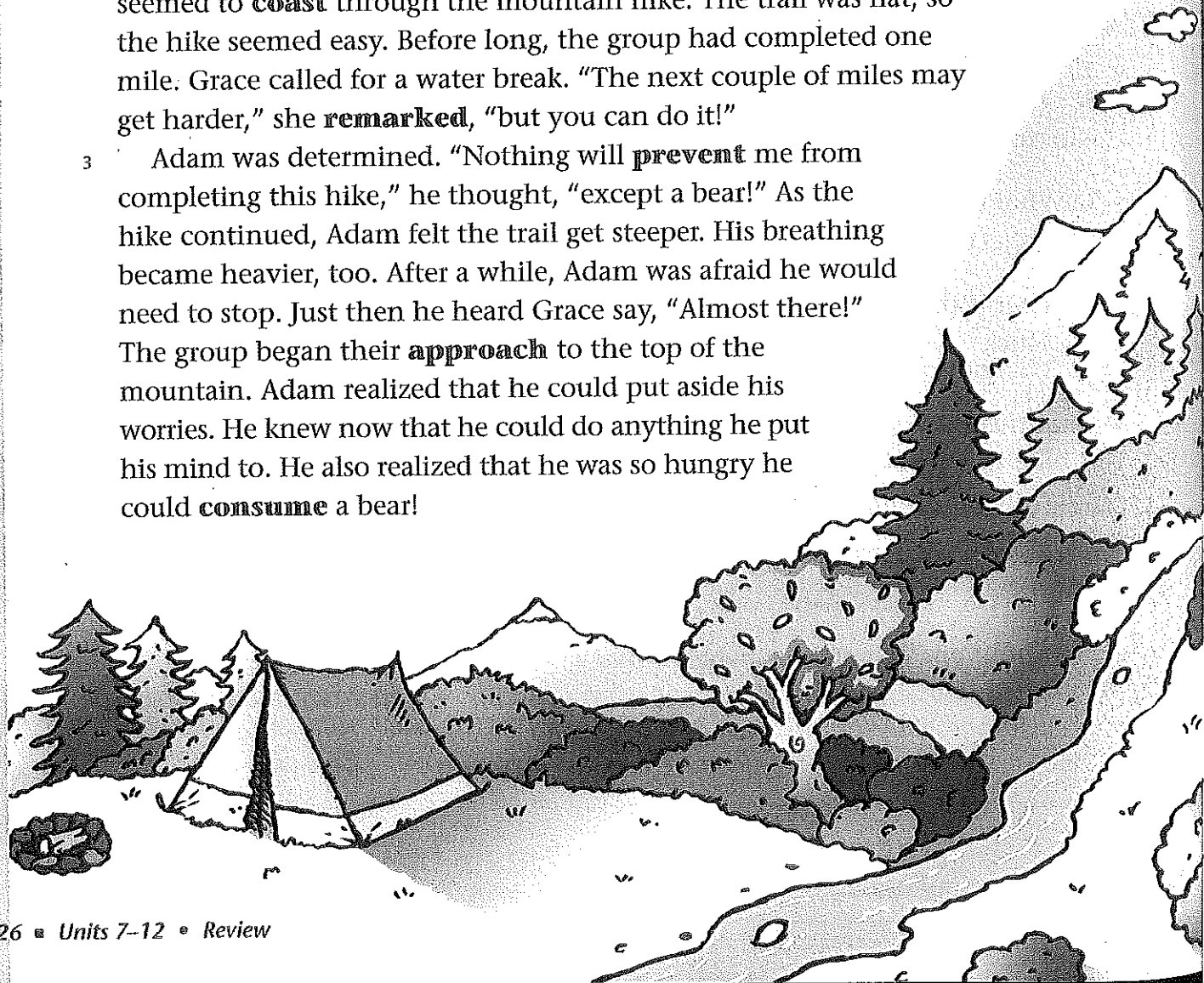


Vocabulary for Comprehension

Read the following passage in which some of the words you have studied in Units 7–12 appear in boldface. Then answer the questions.

A Mountain Hike

- 1 Adam gazed at the huge, magnificent mountain ahead of him. He intended not only to hike to the top but also to camp out there overnight. Although Adam was excited, he was nervous. He had never hiked this far before. He was worried about wild animals, too. What if a bear entered his tent? Adam knew it was important to **pattern** his behavior after watchful hikers. "I'll have to be aware of my surroundings at all times," Adam said to himself.
- 2 His camp counselor's whistle interrupted his thoughts. "Let's get going!" Grace told all ten campers. Adam was determined to **conquer** the challenge. His response was **prompt**. He began to walk at a brisk pace to keep up with his friends. At first, the group seemed to **coast** through the mountain hike. The trail was flat, so the hike seemed easy. Before long, the group had completed one mile. Grace called for a water break. "The next couple of miles may get harder," she **remarked**, "but you can do it!"
- 3 Adam was determined. "Nothing will **prevent** me from completing this hike," he thought, "except a bear!" As the hike continued, Adam felt the trail get steeper. His breathing became heavier, too. After a while, Adam was afraid he would need to stop. Just then he heard Grace say, "Almost there!" The group began their **approach** to the top of the mountain. Adam realized that he could put aside his worries. He knew now that he could do anything he put his mind to. He also realized that he was so hungry he could **consume** a bear!



Fill in the circle next to the choice that best answers the question.

1. Which statement best expresses a theme of this passage?
 - (a) People should not be afraid of bears.
 - (b) Challenging yourself is rewarding.
 - (c) Mountain climbing is not fun.
 - (d) Walking too quickly leads to problems.
2. What does the word **pattern** most likely mean as it is used in paragraph 1?
 - (a) design
 - (b) model
 - (c) invent
 - (d) hard
3. What does the word **prompt** most likely mean as it is used in paragraph 2?
 - (a) scarce
 - (b) patient
 - (c) safe
 - (d) quick
4. What does the word **coast** mean as it is used in paragraph 2?
 - (a) to move without effort
 - (b) to walk slowly down the path
 - (c) a piece of land near the ocean
 - (d) a spot closer to the sea
5. What is the meaning of **remarked** as it is used in paragraph 2?
 - (a) disrespected
 - (b) silenced
 - (c) failed
 - (d) stated
6. What is the meaning of **approach** as it is used in paragraph 3?
 - (a) leaving
 - (b) dealing with something
 - (c) nearing
 - (d) exiting
7. Which words from paragraph 3 help the reader understand the meaning of **approach**?
 - (a) "After a while"
 - (b) "Almost there!"
 - (c) "top of the mountain"
 - (d) "put aside"
8. What is the meaning of **consume** as it is used in paragraph 3?
 - (a) build
 - (b) protect
 - (c) eat
 - (d) save

Write Your Own

In this story, Adam battled fear and nervousness, but he eventually met his goal and completed a long hike. Imagine how you would feel if you were in a similar situation. Tell a story (real or made up) in which you deal with a fear and complete a challenge. Use at least three words from Units 7–12.

Words in Context

Read the passage. Then answer each question.

Special Olympics

1 Special Olympics helps people all over the world. This event offers sports training to people with intellectual disabilities (IDs). Many people with IDs **yearn** to feel that they are part of a caring community. Special Olympics provides this experience through **authentic** sports competition.


2 Special Olympics is funded through donations and **grants**. The organization was founded in 1968 by Eunice Kennedy Shriver, a sister of President John F. Kennedy. Her goals were **modest** in the beginning. But many who attended

the first games **declared** them a great success.


3 One thousand athletes competed in the first games. To date, more than five million athletes have taken part. The athletes come from over 170 countries and participate in both winter and summer games.

4 **Arch** supporters of Special Olympics include thousands of volunteers who help. Special Olympics athletes prove that they are ready to take on their **opponents** in this exciting competition. And they prove that "disability" is just a word.

1. What does the word **yearn** mean as it is used in paragraph 1?
(a) remember (b) wish (c) forget (d) decide
2. What is the meaning of the word **authentic** as it is used in paragraph 1?
(a) genuine (b) adaptable (c) ordinary (d) false
3. What does the word **modest** most likely mean as it is used in paragraph 2?
(a) incomplete (b) excessive (c) respectful (d) humble
4. What does the word **arch** most likely mean as it is used in paragraph 4?
(a) peaceful (b) secondary (c) principal (d) past

 An object pronoun takes the place of a noun that follows an action verb. For example: I invited Amelia. I invited her. I Underline an example of an object pronoun in the passage.

Write Your Own

 Write 3–5 sentences about your favorite sport or sports activity, using at least three words from the unit. Share your sentences with a partner. How are the sports similar? How are they different?

Words in Context

✦ Read the passage. Then answer each question.

Flying with Bessie Coleman


1 Bessie Coleman was an African American woman born in segregated Atlanta, Texas in 1892. Segregation means enforced **separation** between races. As a girl, Bessie **exhausted** herself as she walked four miles to her segregated school.

2 At age 23, Coleman moved to Chicago. She hoped that life in the big city, **distant** from the segregated South, would offer more opportunities. Her brothers returned from World War I with stories about French women pilots. Coleman thought these women's achievements were **admirable**.


Her brothers' stories **kindled** Coleman's desire to be a pilot.

3 Coleman applied to flight schools in the United States. None of the schools would accept an African American woman, so she moved to France to attend flight school. She received her international pilot's license in 1921. In 1922, she became the first African American woman to perform a public flight. Soon, flying became **automatic** for her. She was famous for her **stunts**. Coleman died in a flying accident in 1926.

1. What does the word **exhausted** mean as it is used in paragraph 1?
(a) taught (b) tired (c) engine fumes (d) entertainment
2. What does the word **distant** most likely mean as it is used in paragraph 2?
(a) far away (b) exciting (c) close together (d) not friendly
3. What does the word **kindled** most likely mean as it is used in paragraph 2?
(a) ended (b) hid (c) started a fire (d) stirred up
4. What is the meaning of the word **stunts** as it is used in paragraph 3?
(a) stops growth (b) slows growth (c) acts of bravery (d) observations of others

 A possessive pronoun shows who or what has something. It takes the place of a possessive noun. My, your, his, her, its, our, and their are possessive pronouns. Underline a possessive pronoun in "Flying with Bessie Coleman."

Write Your Own

 Write 3–5 sentences to tell about a skill you would like to learn. Use three vocabulary words from this unit in your writing. Have your partner identify the vocabulary words you used and then use at least one of the words in a sentence.

Add and Subtract Decimals

Name _____

Date _____

| Add hundredths. | Add tenths. | Add ones. | Subtract hundredths. | Subtract tenths. | Subtract ones. |
|----------------------------------------------------------|-----------------------------------------------------------|------------------------------------------------------------------|-----------------------------------------------------------------|------------------------------------------------------------------|--------------------------------------------------------------------|
| $\begin{array}{r} 3.75 \\ +2.53 \\ \hline 8 \end{array}$ | $\begin{array}{r} 3.75 \\ +2.53 \\ \hline 28 \end{array}$ | $\begin{array}{r} 1 \\ 3.75 \\ +2.53 \\ \hline 6.28 \end{array}$ | $\begin{array}{r} 715 \\ 6.85 \\ -3.17 \\ \hline 8 \end{array}$ | $\begin{array}{r} 715 \\ 6.85 \\ -3.17 \\ \hline 68 \end{array}$ | $\begin{array}{r} 715 \\ 6.85 \\ -3.17 \\ \hline 3.68 \end{array}$ |

Find the sum.

1.
$$\begin{array}{r} 1.6 \\ +2.2 \\ \hline \end{array}$$

2.
$$\begin{array}{r} 7.2 \\ +1.4 \\ \hline \end{array}$$

3.
$$\begin{array}{r} 24.7 \\ +13.4 \\ \hline \end{array}$$

4.
$$\begin{array}{r} 4.03 \\ +1.92 \\ \hline \end{array}$$

5.
$$\begin{array}{r} 4.76 \\ +1.63 \\ \hline \end{array}$$

6.
$$\begin{array}{r} 2.5 \\ 3.7 \\ +7.4 \\ \hline \end{array}$$

7.
$$\begin{array}{r} 4.5 \\ 5.5 \\ +8.6 \\ \hline \end{array}$$

8.
$$\begin{array}{r} 3.21 \\ 6.83 \\ +2.84 \\ \hline \end{array}$$

9.
$$\begin{array}{r} 4.11 \\ 3.23 \\ +1.83 \\ \hline \end{array}$$

10.
$$\begin{array}{r} 7.14 \\ 4.36 \\ +2.15 \\ \hline \end{array}$$

Find the difference.

11.
$$\begin{array}{r} 5.8 \\ -3.2 \\ \hline \end{array}$$

12.
$$\begin{array}{r} 8.3 \\ -2.7 \\ \hline \end{array}$$

13.
$$\begin{array}{r} 8.63 \\ -4.01 \\ \hline \end{array}$$

14.
$$\begin{array}{r} 8.84 \\ -2.63 \\ \hline \end{array}$$

15.
$$\begin{array}{r} 7.62 \\ -5.39 \\ \hline \end{array}$$

16.
$$\begin{array}{r} 6.78 \\ -3.46 \\ \hline \end{array}$$

17.
$$\begin{array}{r} 8.50 \\ -3.41 \\ \hline \end{array}$$

18.
$$\begin{array}{r} 9.32 \\ -1.88 \\ \hline \end{array}$$

19.
$$\begin{array}{r} 53.27 \\ -14.08 \\ \hline \end{array}$$

20.
$$\begin{array}{r} 63.26 \\ -12.83 \\ \hline \end{array}$$

Add or subtract. Watch for + and - signs.

21.
$$\begin{array}{r} 2.89 \\ +5.70 \\ \hline \end{array}$$

22.
$$\begin{array}{r} 6.80 \\ -4.37 \\ \hline \end{array}$$

23.
$$\begin{array}{r} 7.10 \\ -2.47 \\ \hline \end{array}$$

24.
$$\begin{array}{r} 9.00 \\ +3.48 \\ \hline \end{array}$$

25.
$$\begin{array}{r} 1.90 \\ +5.57 \\ \hline \end{array}$$

Problem Solving

26. Nahoko is training for a cross country race. She ran 2.8 miles on Saturday and 3.2 miles on Sunday. How much farther did she run on Sunday than on Saturday?
- _____

Multiply Money

Name _____

Date _____

What is the total cost of 4 pairs of socks?

Estimate: $4 \times \$2.00 = \8.00

Multiply:

$$\begin{array}{r} 13 \\ \$2.39 \\ \times 4 \\ \hline \$9.56 \end{array}$$

Write \$ and .
in the product.



Four pairs of socks cost \$9.56.

Estimate by rounding. Then multiply.

1. $\begin{array}{r} \$.72 \\ \times 4 \\ \hline \end{array}$

2. $\begin{array}{r} \$.37 \\ \times 2 \\ \hline \end{array}$

3. $\begin{array}{r} \$ 2.83 \\ \times 3 \\ \hline \end{array}$

4. $\begin{array}{r} \$ 3.60 \\ \times 2 \\ \hline \end{array}$

5. $\begin{array}{r} \$ 1.74 \\ \times 4 \\ \hline \end{array}$

6. $\begin{array}{r} \$.45 \\ \times 5 \\ \hline \end{array}$

7. $\begin{array}{r} \$.28 \\ \times 6 \\ \hline \end{array}$

8. $\begin{array}{r} \$ 4.53 \\ \times 3 \\ \hline \end{array}$

9. $\begin{array}{r} \$ 2.76 \\ \times 6 \\ \hline \end{array}$

10. $\begin{array}{r} \$ 5.69 \\ \times 4 \\ \hline \end{array}$

Multiply.

11. $\begin{array}{r} \$.60 \\ \times 3 \\ \hline \end{array}$

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

13. $\begin{array}{r} \$ 1.85 \\ \times 5 \\ \hline \end{array}$

14. $\begin{array}{r} \$ 3.56 \\ \times 6 \\ \hline \end{array}$

15. $\begin{array}{r} \$ 4.89 \\ \times 3 \\ \hline \end{array}$

16. $\begin{array}{r} \$.78 \\ \times 2 \\ \hline \end{array}$

17. $\begin{array}{r} \$.98 \\ \times 4 \\ \hline \end{array}$

18. $\begin{array}{r} \$ 3.80 \\ \times 5 \\ \hline \end{array}$

19. $\begin{array}{r} \$ 2.54 \\ \times 6 \\ \hline \end{array}$

20. $\begin{array}{r} \$ 1.97 \\ \times 7 \\ \hline \end{array}$

21. $7 \times \$9.63 =$ _____ 22. $3 \times \$6.67 =$ _____ 23. $5 \times \$7.05 =$ _____

24. $6 \times \$4.18 =$ _____ 25. $3 \times \$9.22 =$ _____ 26. $8 \times \$5.23 =$ _____

Problem Solving

27. Maidee sold 6 large shell bracelets for \$2.45 each. What was the total cost? _____

28. Jason sold 8 small bracelets for \$1.98 each and 5 large ones for \$6.75. How much money did he make in all? _____

Divide Money

Name _____

Date _____

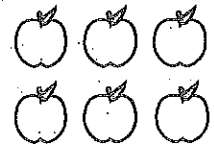
How much does one apple cost?

Divide:

$$\begin{array}{r}
 \$.30 \\
 6 \overline{) \$1.80} \\
 \underline{-18} \\
 0 \\
 \underline{-0} \\
 -0
 \end{array}$$

Bring up the decimal point in the quotient. Then write the \$ sign.

6 for \$1.80



One apple costs \$.30.

Divide and check. If needed, do your work on a separate sheet of paper.

1. $2 \overline{) \$88}$

2. $3 \overline{) \$69}$

3. $2 \overline{) \$60}$

4. $5 \overline{) \$1.00}$

5. $2 \overline{) \$2.40}$

6. $3 \overline{) \$9.39}$

7. $4 \overline{) \$2.44}$

8. $5 \overline{) \$10.00}$

9. $2 \overline{) \$4.8}$

10. $5 \overline{) \$60}$

11. $4 \overline{) \$9.16}$

12. $5 \overline{) \$2.75}$

13. $6 \overline{) \$8.40}$

14. $3 \overline{) \$8.34}$

15. $4 \overline{) \$4.96}$

16. $6 \overline{) \$9.72}$

17. $\$.96 \div 8 = \underline{\hspace{2cm}}$

18. $\$.70 \div 5 = \underline{\hspace{2cm}}$

19. $\$4.00 \div 2 = \underline{\hspace{2cm}}$

20. $\$6.30 \div 3 = \underline{\hspace{2cm}}$

21. $\$9.12 \div 6 = \underline{\hspace{2cm}}$

22. $\$8.56 \div 4 = \underline{\hspace{2cm}}$

Problem Solving

23. Three T-shirts come in a package that costs \$6.75. What is the cost of one T-shirt?

24. Eight headbands come in a bag that costs \$7.60. What is the cost of one headband?

Missing Operation

Name _____

Date _____

Use Guess and Test to find the missing operation.

$6 \ ? \ 9 = 54$

Think: 54 is greater than both
6 and 9.

Guess addition or multiplication.

Test: $6 + 9 = 54$ not true
 $6 \times 9 = 54$ true

$12 \ ? \ 7 = 5$

Think: 5 is less than both
7 and 12.

Guess subtraction or division.

Test: $12 \div 7 = 5$ not true
 $12 - 7 = 5$ true

Write + or - to complete.

1. $8 \ \underline{\quad} \ 5 = 13$ 2. $6 \ \underline{\quad} \ 6 = 12$ 3. $13 \ \underline{\quad} \ 6 = 7$ 4. $7 \ \underline{\quad} \ 7 = 0$

5. $6 \ \underline{\quad} \ 4 = 10$ 6. $6 \ \underline{\quad} \ 3 = 9$ 7. $5 \ \underline{\quad} \ 5 = 10$ 8. $8 \ \underline{\quad} \ 2 = 10$

9. $9 \ \underline{\quad} \ 1 = 10$ 10. $14 \ \underline{\quad} \ 8 = 6$ 11. $9 \ \underline{\quad} \ 6 = 15$ 12. $17 \ \underline{\quad} \ 9 = 8$

Write \times or \div to complete.

13. $5 \ \underline{\quad} \ 8 = 40$ 14. $56 \ \underline{\quad} \ 7 = 8$ 15. $6 \ \underline{\quad} \ 4 = 24$ 16. $2 \ \underline{\quad} \ 9 = 18$

17. $3 \ \underline{\quad} \ 3 = 1$ 18. $35 \ \underline{\quad} \ 7 = 5$ 19. $4 \ \underline{\quad} \ 7 = 28$ 20. $1 \ \underline{\quad} \ 7 = 7$

21. $30 \ \underline{\quad} \ 6 = 5$ 22. $18 \ \underline{\quad} \ 3 = 6$ 23. $9 \ \underline{\quad} \ 5 = 45$ 24. $0 \ \underline{\quad} \ 8 = 0$

Write +, -, \times , or \div to complete.

25. $14 \ \underline{\quad} \ 7 = 7$ 26. $8 \ \underline{\quad} \ 4 = 12$ 27. $4 \ \underline{\quad} \ 4 = 16$ 28. $12 \ \underline{\quad} \ 3 = 4$

29. $9 \ \underline{\quad} \ 8 = 1$ 30. $2 \ \underline{\quad} \ 4 = 8$ 31. $42 \ \underline{\quad} \ 7 = 6$ 32. $8 \ \underline{\quad} \ 8 = 64$

Problem Solving

33. Margaret's swim team practices for 2 hours each day from Monday to Friday. How many hours do they practice in one week?
- _____

Factors

Name _____

Date _____

Use multiplication sentences to find the factors of a number and the common factors of two or more numbers.

Factors of 8: 1, 2, 4, 8

$$1 \times 8 = 8$$

$$2 \times 4 = 8$$

Factors of 6: 1, 2, 3, 6

$$1 \times 6 = 6$$

$$2 \times 3 = 6$$

Common factors
of 6 and 8:
1, 2

Find all the factors of each number.

You may use multiplication sentences.

1. 16 _____

2. 10 _____

3. 28 _____

4. 24 _____

5. 18 _____

6. 20 _____

7. 32 _____

8. 36 _____

List all the common factors of each set of numbers.

9. 8 and 16 _____

10. 21 and 27 _____

11. 12 and 16 _____

12. 8 and 12 _____

13. 20 and 40 _____

14. 15 and 30 _____

15. 9 and 24 _____

16. 10 and 40 _____

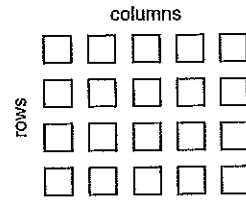
17. 16 and 24 _____

18. 18 and 30 _____



Objective: To use arrays to find products of multiplication facts

Mr. Cheng hangs his students' drawings on the wall. The drawings are arranged in an **array** of 4 rows with 5 drawings in each row. How many drawings does Mr. Cheng hang in all?



There are 4 rows with 5 drawings each.

► To find the number of drawings in all, draw an array. Then add the number in each row or multiply.

$$5 + 5 + 5 + 5 = 20$$

or

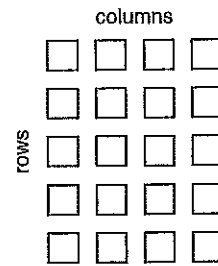
$$4 \times 5 = 20$$

rows in each row in all

Array: a set of objects arranged in *rows* and *columns*. The rows go across and the columns go up and down.

Mr. Cheng hangs 20 drawings in all.

Mr. Cheng can also hang the drawings in a different way. The number of rows and columns are changed, but the product stays the same.



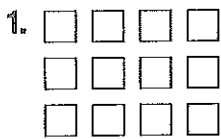
There are 5 rows with 4 drawings each.

$$5 \times 4 = 20$$

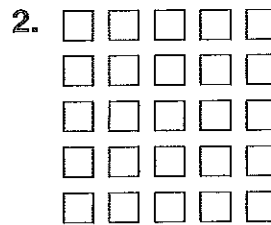
rows in each row in all

Practice

Write a multiplication fact for each array.



_____ × _____ = _____



_____ × _____ = _____

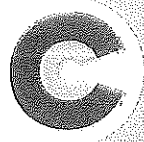
Draw an array for each multiplication fact.

3. $2 \times 9 =$ _____

4. $3 \times 8 =$ _____

Discuss and Write

5. How does a multiplication fact relate to an array?



Name _____

Practice

Find each product.

3. $6 \times 9 = \square$

_____ \times (_____ + 3) = \square

(6 \times _____) + (_____ \times 3) = \square

_____ + _____ = _____

4. $8 \times 7 = \square$

_____ \times (4 + _____) = \square

(_____ \times _____) + (_____ \times _____) = \square

_____ + _____ = _____

5. $7 \times 9 = \square$

$\square =$ _____

7. $9 \times 9 = \square$

$\square =$ _____

9. $5 \times 7 = \square$

$\square =$ _____

6. $5 \times 8 = \square$

$\square =$ _____

8. $8 \times 8 = \square$

$\square =$ _____

10. $5 \times 6 = \square$

$\square =$ _____

Problem Solving

Solve. Use a strategy that works best for you. Show your work.

11. Marty set up 5 rows of chairs. Each row has 6 gray chairs and 3 black chairs.

How many gray chairs? _____

How many black chairs? _____

How many chairs in all? _____

12. Alden made 3 rows of toy vehicles. He put 4 cars and 2 trucks in each row.

How many cars? _____

How many trucks? _____

How many vehicles in all? _____

13. Yano and Bridget both found the product of 4×8 by breaking apart the 8. Yano renamed the 8 as $5 + 3$. Bridget renamed it as $4 + 4$. Show that both students should get the same answer.

Yano

$4 \times 8 \rightarrow 4 \times (5 + 3) = \square$

(_____ \times _____) + (_____ \times _____) = \square

_____ + _____ = _____

Bridget

$4 \times 8 \rightarrow 4 \times (4 + 4) = \square$

(_____ \times _____) + (_____ \times _____) = \square

_____ + _____ = _____

What's the Error?

14. Circle the error in this example. Then correct the error.

$8 \times 6 \rightarrow 8 \times (5 + 1) = \square$

(8 \times 5) + (1 \times 5) = \square

40 + 5 = 45
