# Multiplying a Decimal by a Whole Number

MI Day 2 5. NBT. 7

Travis can read a book chapter in 2.6 hours. The book has 18 chapters. How long will it take Travis to read the book?

$$2.6 \times 10^{1} = 26$$
  $26$ 
 $18 \times 1 = 18$   $\times 18$ 
 $208$ 
 $+ 260$ 
 $468$ 

$$468 \div 10^1 = 46.8$$

Step 3. Use reasoning to check your answer. Since 2.6 is greater than one, the answer should be greater than 18. Because 46.8 is greater than 18, your answer is reasonable.

It will take Travis 46.8 hours to read the book.

For questions 1 through 3, find the product.

- **4.** Sara is making pillows. Each pillow requires 1.7 yards of fabric. How many yards of fabric will Sara need to make 9 pillows?
- 5. Light bulbs usually cost \$2. They are on sale for 0.50 of the regular price. What is the sale price? Is this a better price than if the sale price were 0.35 of the regular price?

# Multiplying a Decimal by a Whole Number

Find each product.

1. 5.4 × 3

**2.** 3.8 × 4

**3.** ×

0.55 × 8 **4.** 8.19

Insert a decimal point in each answer to make the equation true.

**5.** 
$$5 \times 6.3 = 315$$
 \_\_\_\_\_

**6.** 
$$3.01 \times 9 = 2709$$

Use the table at the right for Exercises 7-9.

- 7. Which desert accumulates the least amount of rain in August?
- 8. If each month in Reno had the same average rainfall as in August, what would the total number of millimeters be after 12 months?

## Average Desert Rainfall in August

Application of the second seco						
Desert	esert Average Rainfall					
Reno	0.19 mm					
Sahara	0.17 mm					
Mojave	0.1 mm					
Tempe	0.24 mm					

9. In December, the average total rainfall in all of the deserts together is 0.89 mm. Explain how to use the figures from the table to write a comparison of the total desert rainfall in August and December.

- **10.** If 4n = 3.60, which is the value of n?
  - **A** 0.09
- **B** 0.9
- **C** 9
- **D** 90

#### 6-6

#### **Multiplying Two Decimals**

Caroline earns \$2.40 per hour for babysitting her brother. She babysat last night for 3.25 hours. How much did she earn?

First, estimate your product so you can check for reasonableness.

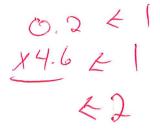
 $$2 \times 3 = 6$ Caroline earned about \$6.00.

**Step 1:** Multiply each factor by powers of 10 to create whole numbers. Then multiply these numbers.

$$2.40 \times 10^{2} = 240$$
 325  
 $3.25 \times 10^{2} = 325$   $\times$  240  
000  
13,000  
+65,000  
78,000

Step 2: Because you multipled each factor by 102, you must divide your answer by 102 two times.

$$78,000 \div 10^4 = 7.8000$$



7.8000 = \$7.80

Caroline earned \$7.80 last night. Because \$7.80 is close to your estimate of \$6, your answer is reasonable.

Find each product. Check by estimating.

**4.** 0.53 × 6.4 \_\_\_\_\_ **5.** 9.3 × 5.86 \_\_\_\_\_ **6.** 0.37 × 4.4 \_\_\_\_

**6.** 
$$0.37 \times 4.4$$

7. Jackie wants to buy a new CD player. It costs \$32.95. She has saved \$26 and has a coupon for 30% off the price. Does Jackie have enough money to buy the CD player?

### **Multiplying Two Decimals**

Find each product.

1. 3.2 × 0.3

**2.** 4.4 × 0.2

**3.** 8.6 × 3.4

**4.** 1.9  $\times$  0.05

**5.**  $0.79 \times 4.3 =$  \_\_\_\_\_

**6.**  $0.8 \times 0.05 =$  \_\_\_\_\_

- **7.** The product of 4.7 and 6.5 equals 30.55. What is the product of 4.7 and 0.65? 4.7 and 65?
- **8.** What would be the gravity in relation to Earth of a planet with 3.4 times the gravity of Mercury?

Relative (to Earth)
Surface Gravity

**9.** The gravity of Venus is 0.35 times that of Jupiter. What is the gravity of Venus in relation to Earth's gravity?

Planet Gravity
Mercury 0.39
Neptune 1.22
Jupiter 2.6

- 10. How many decimal places are in the product of a number with decimal places to the hundredths multiplied by a number with decimal places to the tenths?
  - **A** 2
- **B** 3
- **C** 4

- **D** 5
- **11.** Explain how you know the number of decimal places that should be in the product when you multiply two decimal numbers together.

## **Shall We Dance?**

NTI Day 2 RL. 5.4

Have you ever attended a dance performance?

- "Gavin!" called Mr. Capshaw. "We're ready to go. Are you coming?"
- <sup>2</sup> Gavin shuffled slowly down the stairs and joined his parents at the front door. "I'm ready," he said with a sigh.
- "This will be fun. I know you'll enjoy the performance," Mrs. Capshaw told her son. "Afterward, we might even get to go backstage and meet Dad's friend from college. Joseph has one of the lead roles in the show," she explained.
- <sup>4</sup> The Capshaws walked down the street toward the subway station. "I don't even like ballet," Gavin complained.
- "Not all dance is ballet, Gavin," said Mr. Capshaw. "The show we're going to see tonight is modern dance. But there are many other kinds of dance, too—tap, jazz, break dancing, square dancing, the tango, the waltz. I'd like you to keep an open mind about this."
- <sup>6</sup> Gavin sighed again. "Okay, Dad. I'll do my best."
- About 45 minutes later, the Capshaws arrived at the theater. A woman wearing a bright red vest and carrying a flashlight helped them find their seats in the mezzanine. Gavin looked around him while he waited for the performance to begin. He couldn't believe how many people there were in the theater. Gavin looked straight up at the ornate ceiling painted in gold, midnight blue, and maroon. Suddenly, the lights dimmed, and the audience began to clap.
- Once the performance began, Gavin forgot all about the usher, his parents, the rest of the audience, and the ornate ceiling. He listened to the music and watched the dancers move. The performers made the moves look so easy, but he could tell it was much more difficult than it appeared. He leaned forward in his seat and tapped his toes in time to the rhythm of the music.

- "Well, what did you think?" asked Gavin's parents when the lights came back on.
- "That was amazing. I'm so glad we came," he replied.
- "Come on, let's go see if we can find Joseph," said Mr. Capshaw, putting one arm around Gavin's shoulders. The Capshaws made their way to a small hallway at the front of the theater. A moment later, they were shaking hands with Joseph and complimenting him on his performance.
- "Is it a lot of work to prepare the show?" Gavin asked Joseph.
- Joseph chuckled. "I've never worked so hard in my life," he said, "but I've also never had so much fun. Are you a performer, Gavin?"
- 14 Gavin shook his head.
- "Do you think dance is something you'd like to try?" asked Joseph. "You seem very enthusiastic about tonight's show. The performing arts center is only a few blocks from here, and they offer a beginner's class in modern dance. I know some of the teachers there. I'd be happy to introduce you if you're interested."
- Gavin grinned. "When can I start?" he asked.



NAME	

### Vocabulary Skills

Write the words from the story that have the meanings below.

1. walked slowly, dragging the feet

Par. 2

2. the main or most important part in a performance

Par. 3

3. the lowest balcony in a theater

Par. 7

4. decorated in a very detailed, complex way

Par. 7

Words that have two middle consonants are divided into syllables between the consonants. For example, *pic/ture* or *bas/ket*. Divide the words below into syllables using a slash (/).

- 5. perform
- 7. ornate

6. tango

8. center

Read each word below. Then, write the letter of its synonym on the line beside the word.

- 9. \_\_\_\_ walked
- a. beat
- 10. \_\_\_\_\_ began
- b. strolled
- 11. \_\_\_\_\_ rhythm
- c. started
- 12. \_\_\_\_ chuckle
- d. laugh

#### Reading Skills

1. Find one sentence that shows Gavin was not looking forward to going to the dance performance. Write it on the lines below.

- 2. What problem did Gavin have at the beginning of the story?
- 3. How did Gavin feel about the performance once it began?

Write F before the sentences that are facts.
Write O before the sentences that are opinions.

- 4. \_\_\_\_ Modern dance is interesting to watch.
- 5. \_\_\_\_\_ Joseph has one of the lead roles in the performance.
- 6. \_\_\_\_ The Capshaws took the subway to get to the theater.
- 7. \_\_\_\_ Gavin will be a good dancer.

#### Study Skills

A **table of contents** shows the chapters in a book and the page each chapter begins on. Use the table of contents below to answer the questions.

#### **Table of Contents**

- - 2. Which chapter contains information about

1. What is the title of Chapter 2?

the history of dance?

on page 39?

3. What is the title of the chapter that begins

Life was hard for people who lived on the frontier. On the western border of settlement, there was never enough time for all the work that had to be done. The settlers had to learn to help one another. Working together made a job go faster. It also made the job more fun. A barn raising was one of the ways frontier families had fun while getting work done.

At a barn raising neighbors came from miles around to help a family build a barn. The men worked in teams to chop down

trees and cut them into boards and *beams*. The boards were used for the floor of the barn. The beams were used for the frame. Once the frame was up, the owner could finish the barn alone.

Putting the frame in place was a difficult process. First, the beams had to be laid out on the ground in exactly the right position. Next,

they had to be cut to the correct size and shape. Then the beams had to be nailed together to make the frame. After that the entire frame had to be raised. All the men in the group worked together on that job, which took all their strength.

While the building was going on, the children carried tools and nails to the workers. They also took them drinks, usually apple cider or lemonade. Meanwhile, the women were busy preparing food for a hearty meal.

Social occasions like barn raisings gave women a chance to show off their cooking skills. Some made soups and stews, while others cooked dishes such as chicken and dumplings. Still others brought bacon, sausages, and hams. Immigrant women often

> made dishes from their native lands. All the women had homemade bread, pies, cakes, and cookies to add to the table.

RAISING

After the meal and a rest, it was time for fun. Both children and adults enjoyed wrestling

matches, jumping contests, and races. The best part of the evening was the barn dance.

Before the dancing began, people scattered

kernels of corn across the barn floor. Then, as everyone danced, they stepped on the corn, pressing oil out of the kernels. The oil polished the rough floorboards. In addition to being fun, the barn dance served a useful purpose.



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#### **Barn Raising**

#### Choose the best answer and mark the letter of your choice.

- 1. What is the main idea of this article?
  - **A.** Frontier families did not know how to build barns.
  - **B.** Frontier families worked together and had fun together at barn raisings.
  - C. Frontier families needed barns.
  - **D.** Frontier families enjoyed barn dances.
- 2. In this article, the word frontier means
  - F. a western colony.
  - G. a distant neighborhood.
  - **H.** a place where people helped each other.
  - J. the western border of settlement.
- 3. In this article, the word beams means
  - A. boards used for floors.
  - **B.** frames for barns.
  - C. tools for workers.
  - D. rays of light.
- **4.** What happens first in the frame-making process?
  - **F.** The beams are laid on the ground in the right position.
  - **G.** The beams are cut to the correct size and shape.
  - H. The beams are nailed together.
  - J. The frame is raised.

- 5. During a barn raising, children helped by
  - A. carrying supplies and drinks.
  - B. making lemonade.
  - C. preparing food.
  - D. nailing boards together.
- **6.** Why did the women enjoy barn raisings?
  - **F.** They could show off their sewing skills.
  - **G.** They could help the men build the barn.
  - **H.** They could show off their cooking skills.
  - J. They could spend the day resting.
- 7. By stepping on corn kernels, dancers at a barn dance helped
  - A. paint the barn floor.
  - B. polish the barn floor.
  - C. clean the barn floor.
  - D. make the dance more fun.
- **8.** The article gives you enough information to conclude that
  - **F.** frontier men always worked in teams.
  - **G.** barn raisings were the only social events on the frontier.
  - **H.** people who did not help each other could not survive.
  - **J.** working together made life easier and more enjoyable for frontier people.

## I you a question!

### Opinion Statement Practice!!!!

You will create Opinion statements for every topic below. Do not forget to use an Opinion statement sentence starter: In my Opinion

1. What is the best special class?	
In my opinion	
2. Is homework a good idea or a bad idea?	
3. Are video games good or bad for kids?	
4. Should students be paid for doing well in school?	
5. Should kids be allowed to have cell phones at school?	
6. Should we build a new library or a new gym?	
7. Which is better a smartphone or a computer?	

#### Visual Arts/Reflection

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