

## Additional Practice 4-3

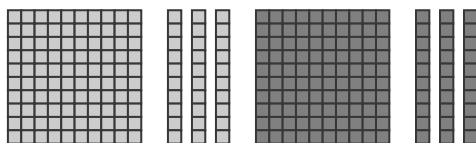
### Use Models to Multiply a Decimal and a Whole Number

#### Another Look!

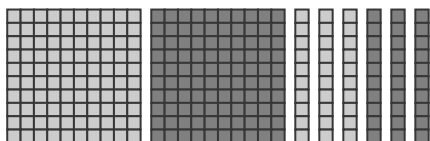
A nature preserve has two hiking trails. Trail 1 is 1.3 miles long. Trail 2 is twice as long as Trail 1. How long is Trail 2?

Use place-value blocks to find the product.

Show 2 groups of 1.3.



Combine the blocks.



So,  $1.3 \times 2 = 2.6$ . Trail 2 is 2.6 miles long.

You can use estimation to check your work.  $1 \times 2 = 2$ , so your answer to  $1.3 \times 2$  will be about 2.



In **1** and **2**, find the product. Use place-value blocks for help.

1.  $0.45 \times 3 = 1.35$

2.  $0.08 \times 6 = 0.48$

In **3–10**, find the product. Use models to help, if needed.

3.  $12 \times 0.08$   
**0.96**

4.  $1.75 \times 4$   
**7**

5.  $0.85 \times 3$   
**2.55**

6.  $6 \times 0.12$   
**0.72**

7.  $3 \times 0.33$   
**0.99**

8.  $0.45 \times 10^2$   
**45**

9.  $3 \times 2.89$   
**8.67**

10.  $7.6 \times 2$   
**15.2**



- 11.** Ryan measures the perimeter of his square painting so he can make a wood frame. Find the perimeter of the painting in centimeters. Remember, the formula for perimeter is  $P = 4 \times s$ . **122 centimeters**



- 12. Reasoning** Write a multiplication number sentence that matches the model.



$$5 \times 0.18 = 0.9$$

Remember,  
each small square  
is 1 hundredth.



- 13.** Anthony bikes a 16.2-mile long trail. If he bikes it 4 times, how far will he have traveled? Draw a bar diagram to help you.

**64.8 miles**



- 14. enVision® STEM** If 7 giant solar power plants generate 1.3 gigawatts (GW) of energy to power 900,000 homes, how many gigawatts can 21 giant solar plants generate?

**3.9 gigawatts**

- 15. Higher Order Thinking** If  $0.36 \times 4 = 1.44$ , how would your product be different if the factors were 0.36 and 0.4? **There would be 3 decimal places rather than 2. The product would be 0.144.**



### Assessment Practice

- 16.** Doug's family buys 7 postcards while on vacation. Each postcard costs \$0.25 including tax.

#### Part A

How can Doug use place-value blocks to find the total cost of the postcards? What is the total cost?

**\$1.75; Sample answer: Doug can use 7 groups of 2 longs and 5 small squares. He can regroup the blocks to get 1 flat, 7 longs, and 5 small squares, which represents \$1.75.**

#### Part B

How can Doug use what he knows about whole-number multiplication to check his answer?

**Sample answer:  $7 \times 25 = 175$ , so  $7 \times 2.5 = 17.5$ , and  $7 \times 0.25 = 1.75$ .**