



# Multiply Decimals and Whole Numbers

Let's multiply whole numbers by tenths and hundredths.

## Warm-up

### True or False: Place Value Products

Decide if each statement is true or false. Be prepared to explain your reasoning.

- $100 \times 0.01 = 1$

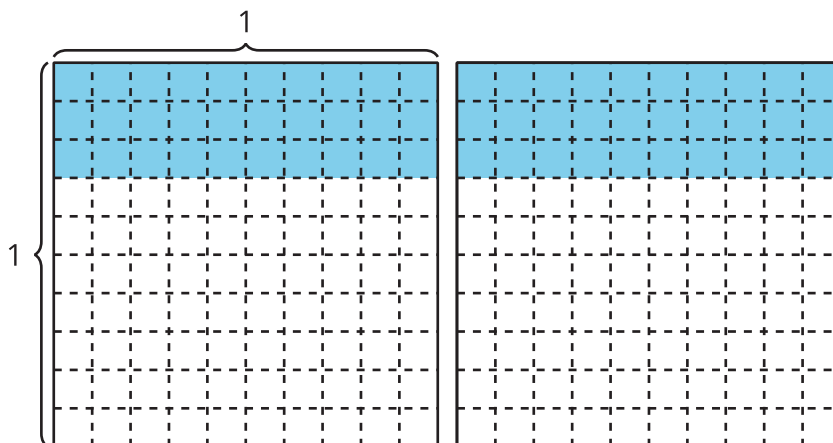
- $10 \times 0.1 = 0.01$

- $10 \times 0.01 = 0.1$

## Activity 1

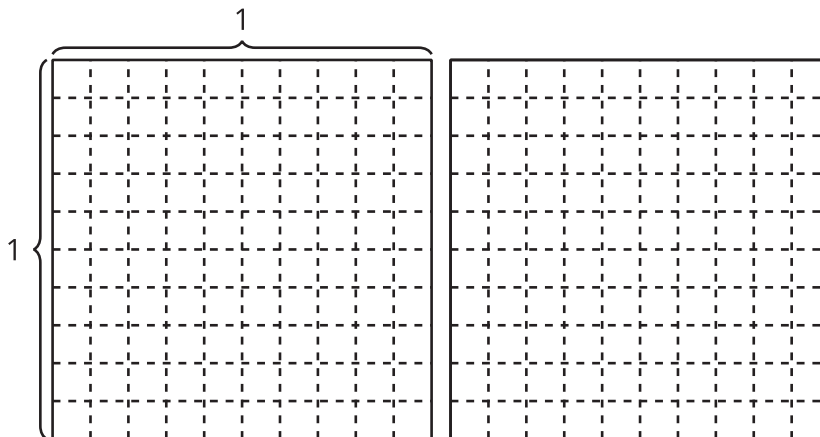
### Multiply Decimals by Whole Numbers

How many do you see?

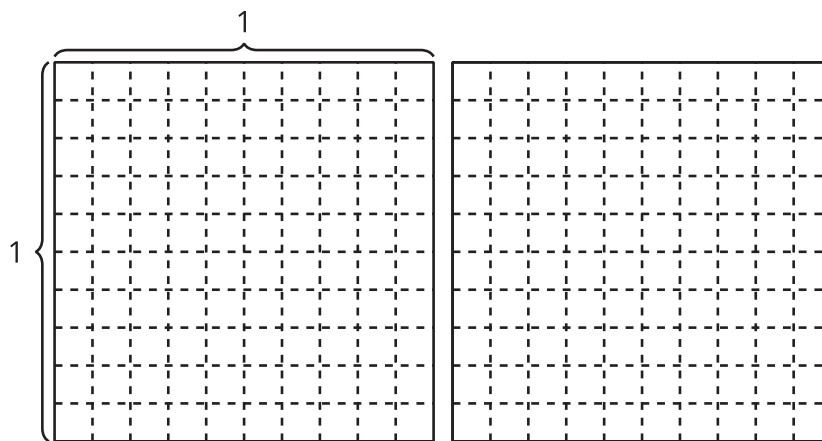


Find the value of each expression in a way that makes sense to you. Explain or show your reasoning. Use the diagrams if they are helpful.

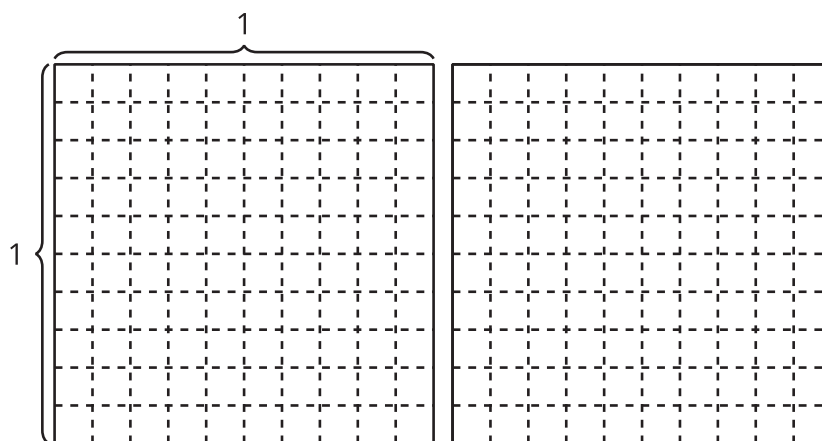
1.  $2 \times 0.7$



2.  $2 \times 0.08$



3.  $2 \times 0.78$



## Activity 2

### Using Whole Number Products

1. Find the value of each expression. Explain or show your reasoning.

a.  $3 \times 0.5$

b.  $5 \times 0.3$

c.  $7 \times 0.02$

2. Kiran writes this explanation to describe the strategy he used to multiply a whole number by some tenths:

“I just turn the numbers into whole numbers, multiply them, and call them tenths.”

Fill in the blanks to show how Kiran’s strategy works.

$$6 \times 0.7 = 6 \times \text{ \_\_\_\_\_\_ } \text{ tenths} = \text{ \_\_\_\_\_\_ } \text{ tenths} = 4.2$$

$$6 \times 0.07 = 6 \times \text{ \_\_\_\_\_\_ } \text{ hundredths} = \text{ \_\_\_\_\_\_ } \text{ hundredths} = \text{ \_\_\_\_\_\_ }$$

