



# Use Properties to Multiply Decimals

Let's interpret and find the value of multiplication expressions with decimals and whole numbers.

## Warm-up

### Number Talk: Many Hundredths

Find the value of each expression mentally.

- $40 \times 2 \times 0.1$
- $20 \times 0.1 \times 4$
- $0.1 \times 80$
- $0.01 \times 20 \times 40$

## Activity 1

### Card Sort: Decimal Multiplication Expressions

Your teacher will give you a set of cards that show multiplication expressions.

1. Sort the cards into 2 categories of your choosing. Be ready to explain the meaning of your categories.

Then sort the cards into 2 categories in a different way. Be ready to explain the meaning of your new categories. (Pause for teacher directions.)

2. Find Cards A, B, and C. Group each expression with the other expressions that have the same value. Be ready to explain your reasoning.

3. Choose 1 expression from each group. Find the value of the expressions on Cards A, B, and C.

4. Write at least 1 more expression that has the same value as each expression on Cards A, B, and C.

## Activity 2

### Choose a Strategy

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

1.  $6 \times 0.12$

2.  $4 \times 1.4$

3.  $5 \times 3.9$

4.  $25 \times 0.41$

### Activity 3

## More Multiplication Problems

Find the value of each expression.

1.  $35 \times 0.08$

2.  $35 \times 0.7$

3.  $35 \times 0.78$

4.  $42 \times 0.66$