



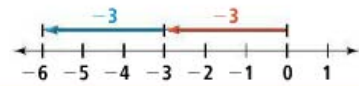
**Key Concept Multiplying Real Numbers**

1-6

**Words** The product of two real numbers with different signs is *negative*.

**Examples**  $2(-3) = -6$       $-2 \cdot 3 = -6$

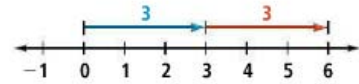
**Model**  $2(-3) = -6$



**Words** The product of two real numbers with the same sign is *positive*.

**Examples**  $2 \cdot 3 = 6$       $-2(-3) = 6$

**Model**  $2 \cdot 3 = 6$



Does division work the same way?



**Problem 1 Multiplying Real Numbers**

**Plan**

What is your first step in finding a product of real numbers? Identify the signs of the factors. Then determine the sign of the product.

What is each product?

**A**  $12(-8) =$

**B**  $24(0.5) =$

**C**  $-\frac{3}{4} \cdot \frac{1}{2} =$

**D**  $(-3)^2 = (-3)(-3) =$



**Got It!** 1. What is each product?

a.  $6(-15)$

b.  $12(0.2)$

c.  $-\frac{7}{10}(\frac{3}{5})$

d.  $(-4)^2$

What is  $\frac{6}{2}$ ? How do you know?

What is  $\frac{0}{4}$ ? How do you know?

What is  $\frac{5}{0}$ ? How do you know?