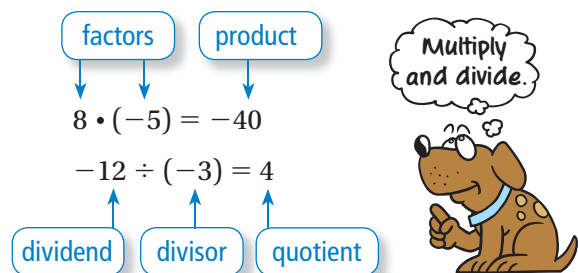


# REVIEW: Multiplying and Dividing Integers

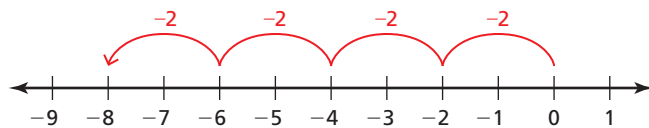
Name \_\_\_\_\_

## Key Concept and Vocabulary



## Visual Model

$$4 \cdot (-2) = (-2) + (-2) + (-2) + (-2)$$



## Skill Examples

- $-3 \cdot (-4) = 12$  ← same sign, product and quotient positive
- $-36 \div (-6) = 6$  ← same sign, product and quotient positive
- $-7 \cdot 0 = 0$
- $-10 \div 5 = -2$  ← different signs, product and quotient negative
- $-5 \cdot 6 = -30$  ← different signs, product and quotient negative

## Application Example

- You pay six friends \$5 each from your bank account. Use integer multiplication to represent the change in the amount of money in your account.

$$6 \cdot (-5) = -30$$

- The amount of money in your bank account decreases \$30.

## PRACTICE MAKES PURR-FECT®



Check your answers at [BigIdeasMath.com](http://BigIdeasMath.com).

Find the product or quotient.

- $-3 \times (-5) = \underline{15}$
- $7(-3) = \underline{-21}$
- $0 \cdot (-5) = \underline{0}$
- $(-5)(-7) = \underline{35}$
- $-8 \cdot 2 = \underline{-16}$
- $(-5)^2 = \underline{25}$
- $(-3)^3 = \underline{-27}$
- $4(-2)(-3) = \underline{24}$
- $-16 \div 4 = \underline{-4}$
- $-20 \div (-5) = \underline{4}$
- $\frac{-9}{3} = \underline{-3}$
- $\frac{-20}{-10} = \underline{2}$

Complete the multiplication or division equation.

- $-15 \div \underline{5} = -3$
- $45 \div \underline{(-9)} = -5$
- $\underline{-100} \div (-20) = 5$
- $8 \cdot \underline{(-8)} = -64$
- $\underline{-3} \cdot (-9) = 27$
- $-12 \cdot \underline{8} = -96$

- BANK ACCOUNT** You pay eight friends \$10 each from your bank account. Use integer multiplication to represent the change in the amount of money in your account.

$$\underline{8 \cdot (-10) = -80}$$

- TEMPERATURE** The low temperatures for a week in Edmonton, Alberta are  $-15^\circ\text{C}$ ,  $-12^\circ\text{C}$ ,  $-10^\circ\text{C}$ ,  $-12^\circ\text{C}$ ,  $-18^\circ\text{C}$ ,  $-20^\circ\text{C}$ , and  $-25^\circ\text{C}$ . What is the mean low temperature for the week? Show your work.

$$\underline{-16^\circ\text{C}; [-15 + (-12) + (-10) + (-12) + (-18) + (-20) + (-25)] \div 7}$$

$$\underline{= -112 \div 7 = -16}$$