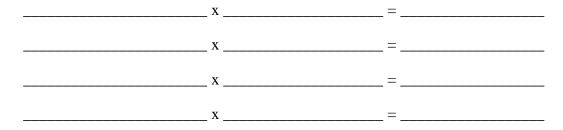
Name:

Date:

# **Day 5\_ Multiplying Integers**

**Essential Question** Is the product of two integers *positive*, *negative*, or zero? How can you tell?

# **Rules for Multiplying Integers**



Multiply.

1. 
$$(-8)(-12)$$

**1.** 
$$(-8)(-12)$$
 **2.**  $10 \bullet (-14)$  **3.**  $-21 \bullet 4$  **4.**  $-15 \bullet (-8)$ 

Answer:\_\_\_\_ Answer:\_\_\_ Answer:\_\_\_ Answer:\_\_\_

**5.** The water in a pool evaporates at a rate of 16 gallons per week. What integer represents the change in the number of gallons of water in the pool after 24 weeks?

Answer:

Multiply.

**6.** 
$$5 \bullet (-11) \bullet (-4)$$
 **7.**  $-15(-3)(-6)$  **8.**  $-9 \bullet 0 \bullet (-3)$ 

**8.** 
$$-9 \bullet 0 \bullet (-3)$$

Answer:

Answer:

Answer:

**9.** 
$$13 \bullet 2 \bullet (-6)$$
 **10.**  $-16 \bullet 2 \bullet (-3)$  **11.**  $-9(-9)(-9)$ 

Answer:

Answer:

Answer:

## Evaluate the expression.

**12**. 
$$(-12)^2$$

**13.** 
$$-12^2$$

**14.** 
$$(-7)^3$$

Answer:

Answer:

Answer:

**15.** 
$$-(-2)^3$$

**16.** 
$$(-2)^3 \bullet (-3)^2$$
 **17.**  $(-11)^2 \bullet 7$ 

**17.** 
$$(-11)^2 \bullet 7$$

Answer:

Answer:

Answer:

**18.** 
$$-3(2^2)(0)$$

**19.** 
$$11(-3) - (-2)(7)$$
 **20.**  $-5 \cdot 8 - (-4)^3$ 

**20.** 
$$-5 \bullet 8 - (-4)^3$$

Answer:

Answer:

Answer:

- **21.** The gym offers a discount when more than one member of the family joins. The first member (n = 0) pays \$550 per year. The second member to join (n = 1) gets a discount of \$75 per year. The third member (n = 2) gets an additional \$75 discount. The price for the *n*th member is given by 550 + (-75n).
  - **a.** What is the price for the fourth member to join (n = 3)?

#### Answer:

**b.** For a large family, is it possible that a member would join for free? If so, which member would it be? Explain your reasoning.

#### Write your response below.

**c.** Other than \$0, what is the lowest amount that a member would pay to join? Which member would it be? Explain your reasoning.

### Write your response below.