

# Reteaching 1-6

## Multiplying and Dividing Real Numbers

**OBJECTIVE:** Multiplying and dividing integers and decimals

**MATERIALS:** A number cube

Review the following multiplication and division rules.

- The product or quotient of two positive numbers is always positive.
- The product or quotient of two negative numbers is always positive.
- The product or quotient of a positive and a negative number is always negative.

### Example

Roll the number cube to determine the signs of the numbers in the following example. If you roll an even number (2, 4, or 6), write + in the blank to make the number positive. If you roll an odd number (1, 3, or 5), write a – in the blank to make the number negative. Decide what sign the answer will have before you calculate the answer.

\_\_\_  $56 \div$  \_\_\_  $7$  ← **Roll the number cube to fill in the blanks.**

$-56 \div (+7)$  ← **Suppose your first roll was a 3, so 56 is negative. Suppose your second roll was 6, so 7 is positive. Now that you have the signs of the numbers, decide what the sign of the answer will be. Dividing a negative number by a positive number results in a negative number.**

$-8$  ← **The answer is  $-8$ .**

### Exercises

**Roll the number cube to determine the signs of the numbers in the following exercises. Remember to decide what sign the answer will have before you calculate the answer.**

1. \_\_\_  $20 \cdot$  \_\_\_  $8$

2. \_\_\_  $3.2 \cdot$  \_\_\_  $10$

3. \_\_\_  $27 \div$  \_\_\_  $3$

4. \_\_\_  $14 \cdot$  \_\_\_  $4$

5. \_\_\_  $120 \div$  \_\_\_  $12$

6. \_\_\_  $45 \div$  \_\_\_  $9$

7. \_\_\_  $1.4 \cdot$  \_\_\_  $3$

8. \_\_\_  $96 \div$  \_\_\_  $8$

**Simplify each expression.**

9.  $4(-2)$

10.  $-6(12)$

11.  $-2(-5)$

12.  $-8(11)$

13.  $(-7)^2$

14.  $-10(-5)$