

## Lesson 1.2 The Distributive Property

The **Distributive Property** combines the operations of addition and multiplication.

$$\begin{array}{rcl}
 a \times (b + c) & = & (a \times b) + (a \times c) \\
 3 \times (2 + 5) & = & (3 \times 2) + (3 \times 5) \\
 3 \times 7 & & 6 \quad + \quad 15 \\
 21 & & 21
 \end{array}$$

Indicate which operation should be done first.

**a****b**

1.  $(2 \times 5) + (2 \times 3)$  \_\_\_\_\_  $7 \times (3 + 5)$  \_\_\_\_\_

2.  $(6 + 9) \times 4$  \_\_\_\_\_  $(3 \times 5) + (3 \times 7)$  \_\_\_\_\_

Rewrite each expression using the Distributive Property.

3.  $4 \times (6 + 2) =$  \_\_\_\_\_  $(2 \times 5) + (2 \times 4) =$  \_\_\_\_\_

4.  $(5 \times 1) + (5 \times 6) =$  \_\_\_\_\_  $4 \times (2 + 6) =$  \_\_\_\_\_

5.  $8 \times (4 + 3) =$  \_\_\_\_\_  $(5 \times 0) + (5 \times 1) =$  \_\_\_\_\_

Write each missing number.

6.  $(5 \times 3) + (n \times 4) = 5 \times (3 + 4)$  \_\_\_\_\_  $7 \times (n + 3) = (7 \times 2) + (7 \times 3)$  \_\_\_\_\_

7.  $n \times (5 + 3) = (6 \times 5) + (6 \times 3)$  \_\_\_\_\_  $(5 \times 7) + (n \times 4) = 5 \times (7 + 4)$  \_\_\_\_\_

8.  $(4 \times 5) + (4 \times 2) = 4 \times (5 + n)$  \_\_\_\_\_  $3 \times (n + 5) = (3 \times 4) + (3 \times 5)$  \_\_\_\_\_

Replace  $a$  with 2,  $b$  with 5, and  $c$  with 3. Then, find the value of each expression

9.  $a \times (b + c) =$  \_\_\_\_\_  $(a \times b) + (a \times c) =$  \_\_\_\_\_

10.  $(c \times a) + (c \times b) =$  \_\_\_\_\_  $b \times (a + c) =$  \_\_\_\_\_