

Write an equivalent expression using the property stated.

1. Identity Property of Addition:  $c + 0 =$  \_\_\_\_\_
2. Identity Property of Multiplication:  $22b \cdot 1 =$  \_\_\_\_\_
3. Multiplicative Property of Zero:  $40,286 \cdot 0 =$  \_\_\_\_\_
4. Commutative Property of Addition:  $x + z =$  \_\_\_\_\_
5. Commutative Property of Multiplication:  $k \cdot 6 =$  \_\_\_\_\_
6. Associative Property of Addition:  $(1 + 3) + 9 =$  \_\_\_\_\_
7. Associative Property of Multiplication:  $(w \cdot h) \cdot l =$  \_\_\_\_\_

Name the property demonstrated by each statement.

8.  $9 \cdot 7 = 7 \cdot 9$  \_\_\_\_\_
9.  $2 \cdot (3 \cdot 4) = (2 \cdot 3) \cdot 4$  \_\_\_\_\_
10.  $37 \cdot 0 = 0$  \_\_\_\_\_
11.  $1 \cdot 87 = 87$  \_\_\_\_\_
12.  $14 + 6 = 6 + 14$  \_\_\_\_\_
13.  $3(6a) = (3 \cdot 6)a$  \_\_\_\_\_
14.  $2b + 0 = 2b$  \_\_\_\_\_
15.  $55 + 6 = 6 + 55$  \_\_\_\_\_
16.  $6 \cdot 7 = 7 \cdot 6$  \_\_\_\_\_
17.  $(x + 3) + y = x + (3 + y)$  \_\_\_\_\_
18.  $1 \cdot mp = mp$  \_\_\_\_\_
19.  $9 + (5 + 35) = (9 + 5) + 35$  \_\_\_\_\_
20.  $6b + 0 = 6b$  \_\_\_\_\_
21.  $7x \cdot 0 = 0$  \_\_\_\_\_
22.  $4(3 \cdot z) = (4 \cdot 3)z$  \_\_\_\_\_
23.  $x + 4 = 4 + x$  \_\_\_\_\_
24.  $14 \cdot 1 = 14$  \_\_\_\_\_
25.  $6 + (5 + m) = (6 + 5) + m$  \_\_\_\_\_



## Using the Distributive Property

Simplify each expression.

1)  $-6(a + 8)$

2)  $4(1 + 9x)$

3)  $6(-5n + 7)$

4)  $(9m + 10) \cdot 2$

5)  $(-4 - 3n) \cdot -8$

6)  $8(-b - 4)$

7)  $(1 - 7n) \cdot 5$

8)  $-6(x + 4)$

9)  $5(3m - 6)$

10)  $(-6p + 7) \cdot -4$

11)  $5(b - 1)$

12)  $(x + 9) \cdot 5$