Lesson 7

Homework

Activity 1

Prove the distributive property works by solving these problems two ways. First distribute, then find the sum in the parentheses before distributing the coefficient.

Model $2(8 + 2)$

Answer: $2 \cdot 8 + 2 \cdot 2 = 16 + 4 = 20$

$2 \cdot 10 = 20$

The answers are the same.

1. $4(3 + 4)$ 2. $5(6 + 2)$ 3. $2(5 + 6)$ 4. $10(7 + 8)$

Activity 2

Practice using the distributive property by simplifying these algebraic expressions.

Model $3(x + 5) \rightarrow 3 \cdot x + 3 \cdot 5 \quad 3x + 15$

1. $4(x + 2)$ 2. $5(1 + d)$ 3. $2(z + 8)$

4. $a(a + 7)$ 5. $-6(b + 20)$

Activity 3

Evaluate the expression using the properties you have learned.

1. $4 + 0 = ?$
   (a) 0
   (b) 1
   (c) 4

2. $2 \cdot 0 = ?$
   (a) 0
   (b) 1
   (c) 2

3. $3 \cdot 0 = ?$
   (a) 0
   (b) 1
   (c) $\frac{1}{3}$

4. $5 + -5 = ?$
   (a) 0
   (b) 1
   (c) $\frac{1}{5}$

5. $a \cdot \frac{1}{a} = ?$
   (a) 0
   (b) 1
   (c) $\frac{a}{1}$

Activity 4 • Distributed Practice

Solve.

1. $\frac{2}{3} \div \frac{2}{3} = a$

2. $\frac{3}{4} + \frac{1}{2} = b$

3. $(-4 \cdot -1) \cdot (-8 \div 4) = c$

4. $3^2 + 2^2 - 10 = d$

5. $\frac{18}{1} \cdot \frac{1}{18} = e$

6. $-\frac{1}{3} - \frac{1}{3} = f$

7. $\frac{2}{4} + -\frac{2}{8} = g$

8. $\frac{8}{1} \cdot \frac{1}{16} = h$