Homework

Activity 1

Write a general statement about each property below. Use the examples provided to help you.

Model Commutative Property for Multiplication

Examples: $5 \cdot 6 = 6 \cdot 5$ $3 \cdot 4 = 4 \cdot 3$ Answer: $a \cdot b = b \cdot a$

1. Associative Property
Examples:
$$1 + (2 + 3) = (1 + 2) + 3$$
$$2 + (4 + 5) = (2 + 4) + 5$$

2. Distributive Property
Examples:
$$3(x + 2) = 3x + 6$$
$$-2(3 + w) = -6 + -2w$$

3. Multiplicative Inverse Property
Examples:
$$\frac{2}{3} \cdot \frac{3}{2} = 1$$
$$\frac{2}{1} \cdot \frac{1}{2} = 1$$

4. Commutative Property for Addition
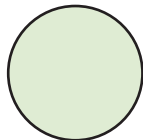Examples:
$$4 + 2 = 2 + 4$$
$$3 + w = w + 3$$

Activity 2

Use PEMDAS and integer rules to evaluate the numeric expressions. Remember to do diagnostics first, then go to the Algebra Toolbox.

1. $-8 + (-2 + -3) \cdot -7$

2. $15 + (-8 - -1) \cdot -2$

3. $10 - -2 \cdot -3 + -2^2$

4. $-16 \div -4 \cdot (-1 - -8)$

Activity 3

Find the volume of each sphere. Use the formula: $V = \frac{4}{3}\pi r^3$. Use 3.14 as the approximation for pi.
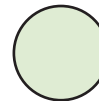
1. $r = 3$

2. $r = 0.5$

3. $r = 1$

Activity 4 • Distributed Practice

Solve.

1. $\frac{2}{3} + \frac{2}{6} = a$

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

3. $(-2 \cdot -2) \cdot -4 \div 4 = c$

4. $4^2 - 2^2 = d$

5. $\frac{6}{1} \cdot \frac{1}{6} = e$

6. $-2 - -4 = f$

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

8. $\frac{10}{1} \cdot \frac{1}{10} = h$