

Practice Lesson

Commutative, Associative, and Zero Properties Review

Commutative Property

“Commute”

$$7 + 8 = 8 + 7$$

$$(-3)4 = 4(-3)$$

$$a + b = b + a$$

$$12 \times a = a \times 12$$

In your own words, describe what you think the commutative property is.

- **The commutative property only works for addition and multiplication**

Associative Property

“Associate”

$$(7+8)+2 = 7+(8+2)$$

$$(a+b)+c = a+(b+c)$$

$$(3 \times 4) \times 2 = 3 \times (4 \times 2)$$

$$(a \times b) \times c = a \times (b \times c)$$

In your own words, describe what you think the associative property is.

- **The commutative property only works for addition and multiplication**

Simplify the expression. Describe each step.

1) $2 + (5 + y)$

2) $(c + 1) + 9$

Simplify the expression. Describe each step.

3) $(2.3 + n) + 1.4$

4) $7 + (d + 5)$

Simplify the expression. Describe each step.

5) $10(7t)$

Multiplication Property of Zero

In your own words, describe what you think the multiplication property of zero.

$$5 \times 0 = 0$$

$$0 \bullet 4 = 0$$

Multiplication Property of One

In your own words, describe what you think the multiplication property of one.

$$5 \times 1 = 5$$

$$1 \bullet 4 = 4$$

Simplify the expression. Describe each step.

6) $6 \bullet 0 \bullet q$

7) $3.6 \bullet s \bullet 1$