

# Properties of Operations

**6<sup>th</sup> Grade Mathematics**

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# Commutative Property

Changing the order of values.

$$5 + 2 = 2 + 5$$

$$9 \cdot 3 = 3 \cdot 9$$

# Associative Property

Changing the grouping symbols ( ).

$$(2 + 7) + 5 = 2 + (7 + 5)$$

$$(5 \cdot 3) \cdot 6 = 5 (3 \cdot 6)$$

## Additive Identity Property

The sum of any number and zero is the original number.

$$8 + 0 = 8$$

The additive identity is zero.

## Multiplicative Identity Property

The product of any number and one is the original number.

$$15 \cdot 1 = 15$$

The multiplicative identity is one.

# Distributive Property

To multiply each number with in the parenthesis by the number outside the parenthesis.

$$5 ( 2 + x )$$

$$5 \cdot 2 + 5 \cdot x$$

$$10 + 5x$$