

Algebra - Properties of Numbers

The video covers the following exercises. Please print this sheet and work along!

Reflexive Property –

Symmetric Property –

Transitive Property –

Substitution Property –

$a + \underline{\hspace{1cm}} = a$ is the $\underline{\hspace{4cm}}$

$a \cdot \underline{\hspace{1cm}} = a$ is the $\underline{\hspace{4cm}}$

$a + \underline{\hspace{1cm}} = 0$ is the $\underline{\hspace{4cm}}$, example: $-3 + \underline{\hspace{1cm}} = 0$

$a \cdot \underline{\hspace{1cm}} = 1$ is the $\underline{\hspace{4cm}}$, example: $4 \cdot \underline{\hspace{1cm}} = 1$



This number is often called the $\underline{\hspace{4cm}}$.

$\underline{\hspace{1cm}} \cdot \underline{\hspace{1cm}} \cdot \underline{\hspace{1cm}} \cdot \underline{\hspace{1cm}} \cdot \underline{\hspace{1cm}} \cdot \underline{\hspace{1cm}} \cdot \underline{\hspace{1cm}} = \underline{\hspace{1cm}}$

This is called The $\underline{\hspace{4cm}}$ Property of $\underline{\hspace{1cm}}$.

Commutative Property –

Associative Property –

Please perform the math operations, and state the property you used in each step.

$$6(3-2) + 4 \cdot \frac{1}{4} + 12(7-7)$$

$$6(\mathbf{1}) + 4 \cdot \frac{1}{4} + 12(7-7)$$

$$6(\mathbf{1}) + 4 \cdot \frac{1}{4} + 12(\mathbf{0})$$

$$\mathbf{6} + 4 \cdot \frac{1}{4} + 12(\mathbf{0})$$

$$6 + \mathbf{1} + 12(\mathbf{0})$$

$$6 + 1 + \mathbf{0}$$

$$\mathbf{7} + 0$$

$$\mathbf{7}$$

Example	x = ?	Property
$7 \cdot x = 0$		
$x + 3 = 10 + 3$		
$4 + x = 4$		
$2 + 10 = 10 + x$		
$4 + x = 0$		
$x \cdot 1 = 5$ OR $1 \cdot x = 5$		
$5 \cdot x = 1$		