

Objective #7

Properties of real numbers

1. Which property is illustrated by the following statement?

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

[A] commutative property

[B] inverse property

[C] distributive property

[D] associative property

$$a+b = b+a$$

order changes \Rightarrow commutative

2. Which property is illustrated by the following statement? If $t > u$ and $u > v$, then $t > v$.

~~[A] Commutative Property of Inequality~~

~~[B] Associative Property of Multiplication~~

[C] Transitive Property of Inequality

~~[D] Associative Property of Addition~~

3. What property is illustrated by the fact that $(47 + 92) + 46 = 47 + (92 + 46)$?

[A] Closure Property for Addition

[B] Associative Property for Addition

[C] Commutative Property for Addition

[D] Identity Property for Addition

$$(47+92) + 46 = 47 + (92+46)$$

Same order
changed grouping = associative

4. What property is illustrated by the fact that $43 \cdot 36 = 36 \cdot 43$?

[A] associative property of multiplication

[B] distributive property

[C] commutative property of multiplication

[D] identity property of multiplication

$$43 \cdot 36 = 36 \cdot 43$$

order changes
 \Rightarrow commutative