Topic: Commutative property

Question: Which of these is the commutative property?

Answer choices:

A $xm = mx$

B $a + c = c + a$

C $(x + 2)(x + 4) = (x + 4)(x + 2)$

D All of these

Solution: D

If the operation is addition or multiplication, the commutative property says that changing the order of the values doesn't change the value of the expression.

Topic: Commutative property

Question: Which of these illustrates the commutative property?

Answer choices:

A $71 = 17$

B $3x + 2x = 2x + 3x$

C $(x + 4)(x - 6) = x^2 - 2x - 24$

D $(mx + b) + c = mx + (b + c)$

Solution: B

Answer choice A is not a true equation, and flipping the digits in a number is not the commutative property. Answer choice C is the distributive property, and answer choice D is the associative property.

Answer choice B is the only choice that illustrates the commutative property, which says that you can change the order of addition without changing the value of the sum.

Topic: Commutative property

Question: Which equation shows the commutative property for multiplication?

Answer choices:

A $a \cdot b = ab$

B $a \cdot b = b \cdot a$

C $ab = a \cdot b$

D $a \cdot b = a \cdot b$

Solution: B

The commutative property states that, in an operation, if you change the order of the terms, the new expression remains equal to the original expression.

Answer choice B is the only choice that shows a different order on each side of the equation.