Topic: Commutative Property

Question: Which of the equations is true based on 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 expressions to be added or multiplied doesn't change the result (the sum in the case of addition, or the product in the case of multiplication).

Topic: Commutative Property

Question: Which of the equations is true based on 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 the Commutative Property doesn't have anything to do with flipping the digits in a number.

Answer choice C illustrates an algebraic property we'll learn later, and answer choice D illustrates the Associative Property.

Answer choice B is the only choice that illustrates the Commutative Property, which says that we can change the order of the expressions being added without changing the value of the sum.

Topic: Commutative Property

Question: Which of the equations is true based on the Commutative Property of Multiplication?

Answer choices:

A $a \cdot b = ab$

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

C $(ab)c = a(bc)$

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

Solution: B

The Commutative Property states that, in an operation, if we 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.