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 expressions to be added or multiplied doesn't change the answer (the sum in the case of addition, or the product in the case of multiplication).

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 the commutative property doesn't apply to 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 you can change the order of the expressions being added 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.