Topic: Associative property

Question: Which of these equations best represents the associative property of addition?

Answer choices:

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

B $a+b+c=a+c+b$

C $a+b+c=b+a+c$

D $a(b+c)=ab+ac$

Solution: A

Answer choice A is the associative property of addition, $(a + b) + c = a + (b + c)$. Order doesn't matter when adding three or more numbers. The other answer choices are properties we'll learn about later in this section.

Topic: Associative property

Question: The associative property of addition tells you that:

Answer choices:

A $(4+3)+2=4+(3+2)$

B $4+3+2=4+2+3$

C $4+3+2=3+4+2$

D $4(3+2)=(4)(3)+(4)(2)$

Solution: A

Answer choice A illustrates the associative property of addition, which tells us that, when we're doing addition, we can group terms together in any order we'd like, and the answer will still be the same.

Topic: Associative property

Question: Which equation shows the associative property for addition?

Answer choices:

A $(x + y) + 2z = x + y + 2z$

B $x + (y + 2z) = (x + (y + 2z))$

C $x + y + 2z = (x + 2z + y)$

D $x + (y + 2z) = (x + y) + 2z$

Solution: D

The associative property has to do with different ways of grouping terms

Answer choice A shows no grouping on the right, so rule out A.

Answer choice B shows a parenthesis error on the right side: two left parentheses, but only one right parenthesis. Rule out B.

Answer choice C shows no grouping on the left. Also, y and $2z$ are in a different order on the right. Rule out C.

Answer choice D correctly shows grouping one pair of terms, $(y + 2z)$, on the left and a different pair of terms, $(x + y)$, on the right.