Name _____ Date _____

Multiplication Equations as a Comparison - Step-by-Step Lesson

2 (3 x 5) = 5 (3 x 2)

Which property of multiplication is displayed in the problem above?

a) Associative **c) Commutative**

b) Distributive **d) Multiplicative Identity**

Explanation:

A quick recap on what you should have already learned in class:

Commutative property of multiplication – When you multiply two numbers together, the final value is the same in spite of the order the numbers are in. For example:

a x b = b x a

Associative property of multiplication – If you are multiplying three numbers or more, the final value is the same. The order in which you multiply them does not matter at all. For example:

(a x b) x c = a x (b x c)

Distributive property of multiplication – When you multiply a number by two numbers that are being added, the final value is equal to the sum that number times each number individually.

Multiplication distributes over addition.

For example: a x (b + c) = a x b + a x c

Identity and Zero property of multiplication – When you multiply a number by 1, the product is that number. When you multiply a number by zero, the product is 0.

Identity property: a x 1 = a

Zero Property: a x 0 = 0

By observing all properties carefully we can conclude that:

This is the associative property of multiplication. We can tell this because the factors are just redistributed, by the values are equal.

So, the answer is "a)".