

Why does it work?

Alex and Morgan were asked to multiply $(3x + 1)(2x + 5)$

Alex's "distributive property" way

Morgan's "FOIL" way

$$(3x + 1)(2x + 5) \quad (3x + 1)(2x + 5)$$

I first distributed the $(3x + 1)$.

The distributive property again of the terms being multiplied.

on the operation multiply.

Lastly, combine like terms.

answer.



Hey Morgan. what did comparing these two examples help us to see?

These examples help us see that the distributive property and FOIL are really the same thing. FOIL is just using the distributive property.

To use FOIL, I wrote down the multiplication of the First terms from each binomial, the two Outside terms, the two Inside terms, and the two Last terms in each binomial, and added each together.

used the distributive property of multiplication to multiply.

used the distributive property to get the answer.



- * How did Alex solve the equation?
- * Why did Morgan multiply all terms as a first step?
- * What are some similarities and differences between Alex's and Morgan's ways?
- * Even though Alex and Morgan did different first steps, why did they both get the same answer?