

Which is correct?

Alex and Morgan were asked to simplify  $(m + 3)^2$

Alex's "square each term" way

Morgan's "use the distributive property" way

$$(m + 3)^2$$

$$(m + 3)^2$$

$$m^2 + 3^2$$

$$(m + 3)(m + 3)$$

$$m^2 + 9$$

$$m^2 + 3m + 3m + 9$$

$$m^2 + 6m + 9$$

First I applied the exponent to each term in the parentheses.

Then I simplified the expression.



First I expanded the expression.

I used the distributive property to multiply each term in the first parentheses by each term in the second parentheses.

Then I combined like terms.



- \* How did Alex simplify the expression?
- \* How did Morgan simplify the expression?
- \* Whose answer is correct, Alex's or Morgan's? How do you know?
- \* What are some similarities and differences between Alex's and Morgan's ways?
- \* Can you state a general rule that describes what you have learned from comparing Alex's and Morgan's ways of simplifying this expression?