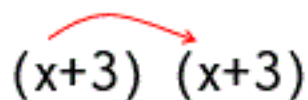


$(x + 3)^2$ ← Exponent 2 means that we need to “square” this binomial or multiply it by itself.

$$(x+3)^2 = (x+3) (x+3)$$

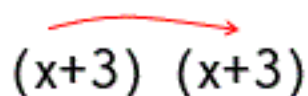
$$(x+3) (x+3)$$

Use FOIL to multiply the binomials.


$$(x+3) (x+3)$$

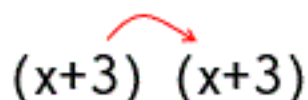
Multiply the **First** terms:
 $(x) (x) = x^2$

$$x^2$$


$$(x+3) (x+3)$$

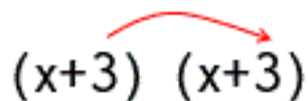
Multiply the **Outer** terms:
 $(x) (3) = 3x$

$$x^2 + 3x$$


$$(x+3) (x+3)$$

Multiply the **Inner** terms:
 $(3) (x) = 3x$

$$x^2 + 3x + 3x$$


$$(x+3) (x+3)$$

Multiply the **Last** terms:
 $(3) (3) = 9$

$$x^2 + 3x + 3x + 9$$

$$x^2 + 6x + 9$$

Combine like terms.

$$x^2 + 6x + 9$$

Solution