

# Solve by Sq Rt WS

Which quadratic equation would you rather solve??  
(neither is not a choice)



$$x^2 - 8x + 16 = 9$$



$$(x - 4)^2 = 9$$

**Goal for today: turn standard form quadratic equation into an equation that can be solved using the square root.**

**This is called "Completing the Square"**

**Solve:**

$$x^2 + 10x + 7 = 0$$

$$(x + 4)^2 =$$

$$(x - 7)^2 =$$

$$(x + 5)^2 =$$

$$(x - 11)^2 =$$

$$x^2 + 12x + 36 =$$

$$x^2 - 20x + 100 =$$

$$x^2 + 18x + 81 =$$

$$x^2 + 16x + ? =$$

$$x^2 - 8x + ? =$$

$$x^2 + 24x + ? =$$

$$x^2 - 10x + ? =$$

$$x^2 - 5x + ?$$

**Is**  $x^2 + 10x + 25$  **a perfect square trinomial?**

**Is**  $x^2 + 14x + 49$  **a perfect square trinomial?**

**Is**  $x^2 - 12x + 30$  **a perfect square trinomial?**



$$x^2 - 12x + 36 = 25$$

$$x^2 - 6x + 2 = 42$$

# Math Practice: p260(3-48m3,58,63,64)