A quadratic equation is an equation in the form

$$0 = ax^2 + bx + c$$

Quadratic Equations can be solved by...

- 1. Taking the Square Root of both sides
- 2. Factoring and Using the Zero Product Rule



- 3. Quadratic Formula
  - 4. Completing the Square

A quadratic equation is an equation in the form

$$0 = ax^2 + bx + c$$
  
 $a = ?$   $b = ?$   $c = ?$ 

Quadratic Formula

$$x = \frac{-b \pm \sqrt{b^2 - 4ac}}{2a}$$

Solve the following quadratics by the quadratic formula.

$$x = \frac{-b \pm \sqrt{b^2 - 4ac}}{2a}$$

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

Solve the following quadratics by the quadratic formula.

$$x = \frac{-b \pm \sqrt{b^2 - 4ac}}{2a}$$

$$0 = 2x^2 - 3x - 9$$

Solve the following quadratics by the quadratic formula.

$$x = \frac{-b \pm \sqrt{b^2 - 4ac}}{2a}$$

$$0 = 3x^2 + 2x - 6$$

Solve the following quadratics by the quadratic formula.

$$x = \frac{-b \pm \sqrt{b^2 - 4ac}}{2a}$$

$$0 = 5x^2 + 13x - 1$$

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$$0 = ax^2 + bx + c$$
  
 $a = ?$   $b = ?$   $c = ?$ 

Quadratic Formula

$$x = \frac{-b \pm \sqrt{b^2 - 4ac}}{2a}$$