

## Quadratic Formula

Today you are going to be introduced to the **quadratic formula**! I want you to use the template to follow the steps for the quadratic formula as best as you can and we will go through it tomorrow in class.

**Standard Form:**  $ax^2 + bx + c = 0$

**EXAMPLE**

**MY EQUATION:**  $x^2 + 4x + 3 = 0$

**A VALUE**  
1

**B VALUE**  
4

**C VALUE**  
3

$$x = \frac{-4 \pm \sqrt{4^2 - 4(1)(3)}}{2(1)}$$

$$x = \frac{-4 \pm \sqrt{16 - 12}}{2}$$

$$x = \frac{-4 \pm \sqrt{4}}{2}$$

**SOLVING WITH THE QUADRATIC FORMULA**

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

$$x = \frac{-4 \pm 2}{2}$$

$$x = \frac{-4 + 2}{2} \text{ and } x = \frac{-4 - 2}{2}$$

$x = -1$

$x = -3$

**SOLVING WITH THE QUADRATIC FORMULA**

**MY EQUATION:**  $x^2 - 5x - 14 = 0$

**A VALUE**  
1

**B VALUE**  
-5

**C VALUE**  
-14

$$x = \frac{-( ) \pm \sqrt{( )^2 - 4( )( )}}{2( )}$$

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

## SOLVING WITH THE QUADRATIC FORMULA

MY EQUATION:  $x^2 - 4x - 4 = 0$

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

A VALUE

$$x = \frac{-( ) \pm \sqrt{( )^2 - 4( )( )}}{2( )}$$

B VALUE

C VALUE

## SOLVING WITH THE QUADRATIC FORMULA

MY EQUATION:  $2x^2 - 3x - 5 = 0$

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

A VALUE

$$x = \frac{-( ) \pm \sqrt{( )^2 - 4( )( )}}{2( )}$$

B VALUE

C VALUE