

The Quadratic Formula:

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

To solve an equation with the Quadratic Formula:

- 1) Make sure the equation is in Standard Form, so the variables are in exponent order, and it is all equal to zero

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

- 2) Determine the numbers that represent a, b, and c.

$$a = \underline{\hspace{2cm}}$$

$$b = \underline{\hspace{2cm}}$$

$$c = \underline{\hspace{2cm}}$$

- 3) Substitute in your values into the Quadratic Formula.
- 4) Simplify the discriminate (the part under the radical) first. That means find $b^2 - 4ac$ and put that number inside the square root.
- 5) Depending on the instructions, you can now find you two answers by simplifying the radical or using a calculator to find a decimal. Remember the \pm sign means you get two answers. One from doing the problem with addition, and the other by doing the problem with subtraction.