

# Developing/Applying the Quadratic Formula

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

Solve quadratic equations when factoring is not possible!

Ensure equation is in **GENERAL FORM**  $\rightarrow Ax^2 + Bx + C = 0$

Example :  $2x^2 + 5x - 1 = 0$        $x = \frac{-5 \pm \sqrt{5^2 - 4(2)(-1)}}{2(2)}$

# Solve!

$$x = \frac{-5 \pm \sqrt{5^2 - 4(2)(-1)}}{2(2)}$$

$$x = \frac{-5 \pm \sqrt{32}}{4}$$

**Two solutions!**

$$x = \frac{-5 + \sqrt{32}}{4}$$

$$x = \frac{-5 - \sqrt{32}}{4}$$