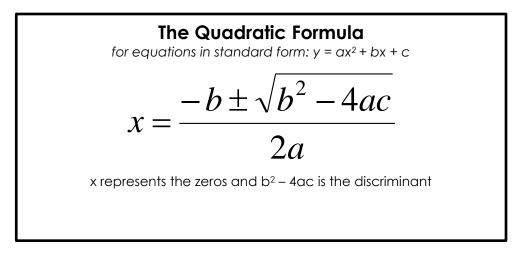## Day 3 - Solving by Quadratic Formula

What method do you use when your equations are not factorable, but are in standard form, and a may not be 1 and b may not be even?

> ### The Quadratic Formula
> *for equations in standard form: y = ax² + bx + c*
>
> $$x = \frac{-b \pm \sqrt{b^2 - 4ac}}{2a}$$
>
> x represents the zeros and b² – 4ac is the discriminant

For the quadratic equations below, use the quadratic formula to find the solutions. Write your answer in simplest radical form.

1) $4x^2 - 13x + 3 = 0$ a = _____ b = _____ c = _____

2) $9x^2 + 6x + 1 = 0$ a = _____ b = _____ c = _____

Discriminant: _____   Discriminant: _____

Solutions: _____   Zeros: _____

3) $6x^2 + 3 = 10x$ a = _____ b = _____ c = _____

4) $\dfrac{1}{2}x^2 + 6x + 13 = 0$ a = _____ b = _____ c = _____

Discriminant: _____

X = _____

Discriminant: _____

Roots: _____