

Zeros of a Quadratic Function

are values of x such that $f(x) = 0$

Given Quadratic Function



Create Quadratic Equation

Quadratic Equations can be solved by...

Zeros of a Quadratic Function

are values of x such that $f(x) = 0$

Given Quadratic Function

$$f(x) = ax^2 + bx + c$$



Create Quadratic Equation

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

$$a = ? \quad b = ? \quad c = ?$$

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

Find the zeros of the following function:

$$f(x) = x^2 + 2x - 8$$

Find the zeros of the following function:

$$f(x) = 4x^2 + 2x - 1$$

Find the zeros of the following function:

$$f(x) = 3x^2 - x + 6$$

Zeros of a Quadratic Function

are values of x such that $f(x) = 0$

Given Quadratic Function

$$f(x) = ax^2 + bx + c$$



Create Quadratic Equation

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

$$a = ? \quad b = ? \quad c = ?$$

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

If $b^2 - 4ac < 0$,
 $f(x)$ has no real zeros

If $b^2 - 4ac \geq 0$,
 $f(x)$ has at least one real zero