

## What is a Quadratic Function?

A function that can be written in the form...

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

where  $a$ ,  $b$ , and  $c$  are real numbers and  $a \neq 0$ .

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

$$f(x) = -4x^2 - 8$$

$$f(x) = 5x + 4$$

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

## What is a Quadratic Equation?

An equation that can be written in the form...

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

where  $a$ ,  $b$ , and  $c$  are real numbers and  $a \neq 0$ .

$$0 = x^2 + 2x + 9$$

$$0 = 4x^2 - 16$$

$$-6x = 3x^2 + 8$$

$$3x + 6 = -x^2$$

Quadratic Function

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

Quadratic Equation

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

where  $a$ ,  $b$ , and  $c$  are real numbers and  $a \neq 0$ .