Name _____
Date _____ Period _____

Quadratic Form

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

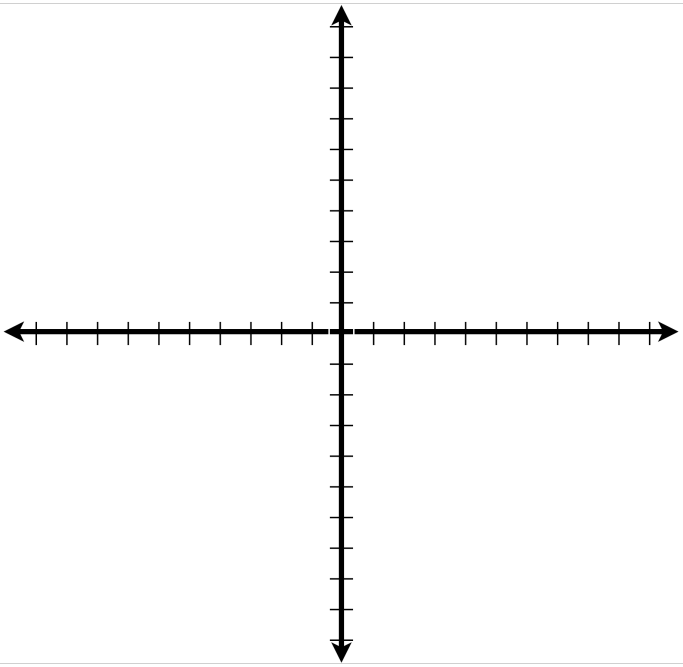
Vertex Axis of Symmetry y-intercept x-intercept(s)

Graph the following quadratic function:

$$f(x) = x^2 + 6x + 5$$

Vertex Axis of Symmetry

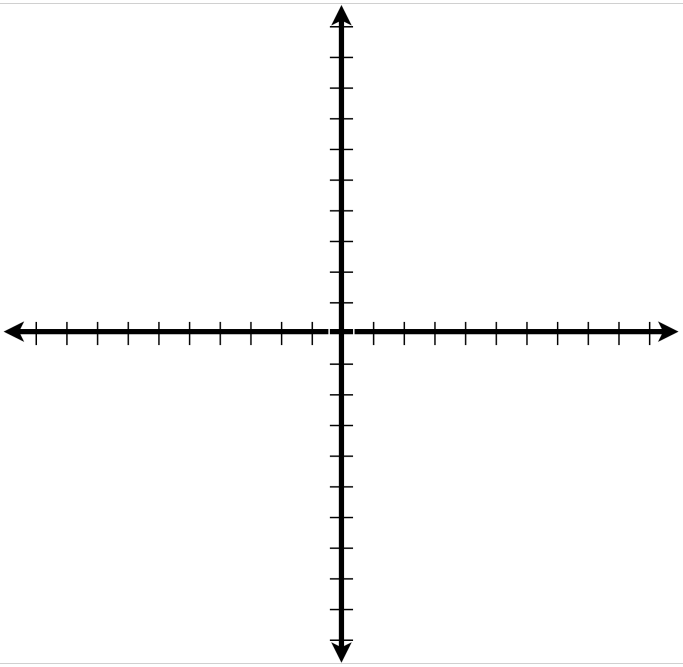
y-intercept x-intercept(s)



Graph the following quadratic function:

$$f(x) = -\frac{1}{2}x^2 + 4x - 6$$

$a = -\frac{1}{2}$ $b = 4$ $c = -6$



Vertex

Axis of Symmetry

y-intercept

x-intercept(s)

Quadratic Form

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

$a = ?$ $b = ?$ $c = ?$

Vertex

$x = \frac{-b}{2a}$

then plug x into equation to find y value.

Axis of Symmetry

the line $x = \frac{-b}{2a}$

y-intercept

$(0, c)$

x-intercept(s)

Find zeros of our Quadratic Function

$0 = ax^2 + bx + c$