

# How to Find the Vertex of a Parabola

## STEP #1

Identify a and b

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

$$f(x) = 1x^2 - 2x + 3$$

## STEP #2

Use the formula to solve for x

$$x = \frac{-b}{2a} \rightarrow x = \frac{-(-2)}{2(1)} \rightarrow x = 1$$

## STEP #3

Input x-value into function to find y-value

$$f(1) = (1)^2 - 2(1) + 3$$
$$f(1) = 1 - 2 + 3 = 2 \rightarrow y = 2$$

