Name		Date		Period	
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Assignment \_\_\_\_\_

## **Graph Quadratics**

Function

## Standard form

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

Specify the important values.

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

$$c =$$

Find the axis of symmetry

$$x = -\frac{b}{2a} \qquad x = -\frac{(\phantom{a})}{2(\phantom{a})} \qquad x = \underline{\phantom{a}}$$



## Find the coordinates of the vertex

- *Substitute the x value into the original function.*
- Solve to find the y value of the vertex.

$$y =$$

The coordinates of the vertex are (



## Graph the function

- Plot the ordered pair for the vertex.
- Use the axis of symmetry from part a as the middle value.
- Pick values on both sides of the axis of symmetry to find more points on the graph or use points on one side and use the properties of symmetry to plot points on the other side.



