

**Axis  
Of  
Symmetry**

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**Vertex**

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**Vertex  
Form**

**Quadratic  
Functions**

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**Y  
Intercept**

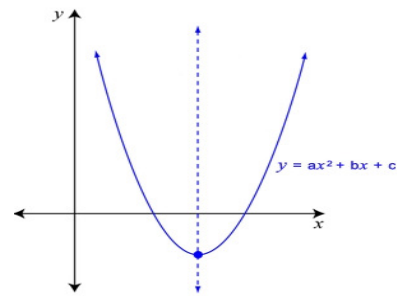
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**Graphing**

Definition:  
A quadratic function is \_\_\_\_\_

Parts of a Quadratic Function:

$$f(x) = \underbrace{2x^2}_{\text{a}} + \underbrace{2x}_{\text{b}} - \underbrace{4}_{\text{c}}$$



The \_\_\_\_\_ divides the parabola into two congruent halves.

The equation for the Axis of Symmetry is:

Example – Find the Axis of Symmetry:

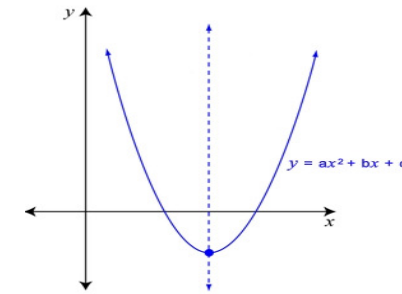
$$y = x^2 - 2x + 3$$

Definition:  
Y-Intercept: \_\_\_\_\_

Note: If the equation is in \_\_\_\_\_,  
the y-intercept is the \_\_\_\_\_.

Example – Find the y-intercept:

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



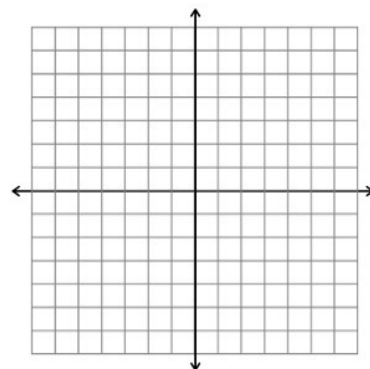
To find the Vertex:

Example – Find the Vertex:

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

How to Graph a Parabola

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



Vertex Form of a Parabola: \_\_\_\_\_

Where \_\_\_\_\_

Example:

Find the vertex of  $y = x^2 - 6x + 8$

Write in vertex form: