A quadratic function is a function that can be written in the form

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

where $a \neq 0$

Given the quadratic functions in standard form, determine the values of a, b, and c.

$$y = 2x^2 + 4x - 1 \qquad y = x^2 - 2x + 5 \qquad y = \text{-}x^2 - 4 \qquad y = \text{-}3x^2 - x$$

A quadratic function is a function that can be written in the form

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

$$a = \qquad b = \qquad c =$$

Vertex

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

then plug x into
equation to find y value.

Axis of Symmetry

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

Find the vertex and axis of symmetry for the following quadratic functions

$$y = x^2 + 6x + 5$$

Vertex   Axis of Symmetry

Find the vertex and axis of symmetry for the following quadratic functions

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

Vertex   Axis of Symmetry

Find the vertex and axis of symmetry for the following quadratic functions

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

Vertex   Axis of Symmetry

Find the vertex and axis of symmetry for the following quadratic functions

$$y = 2x^2 - 8x$$

Vertex   Axis of Symmetry

Find the vertex and axis of symmetry for the following quadratic functions

$$y = -\frac{1}{2}x^2 + 4x - 6$$

Vertex   Axis of Symmetry

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

$$a = \quad b = \quad c =$$

Vertex   Axis of Symmetry

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

then plug x into
equation to find y value.