

Name:

Date:

Period:

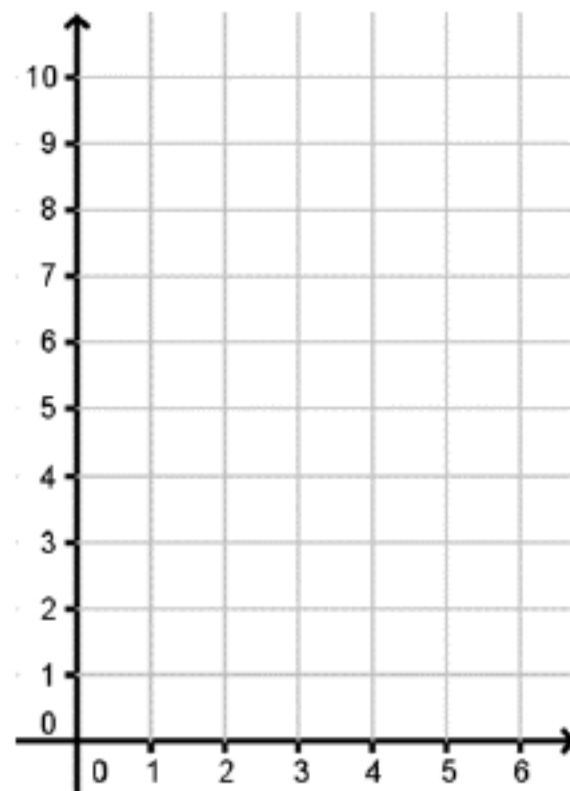
Practice Worksheet: Graphing Quadratic Functions in Vertex Form

For #1-6, label the axis of symmetry, vertex, y-intercept, and at least three more points on the graph.

1] $y = (x - 3)^2$

Axis of Symmetry is $x = \underline{\hspace{2cm}}$ Vertex: $(\underline{\hspace{1cm}}, \underline{\hspace{1cm}})$

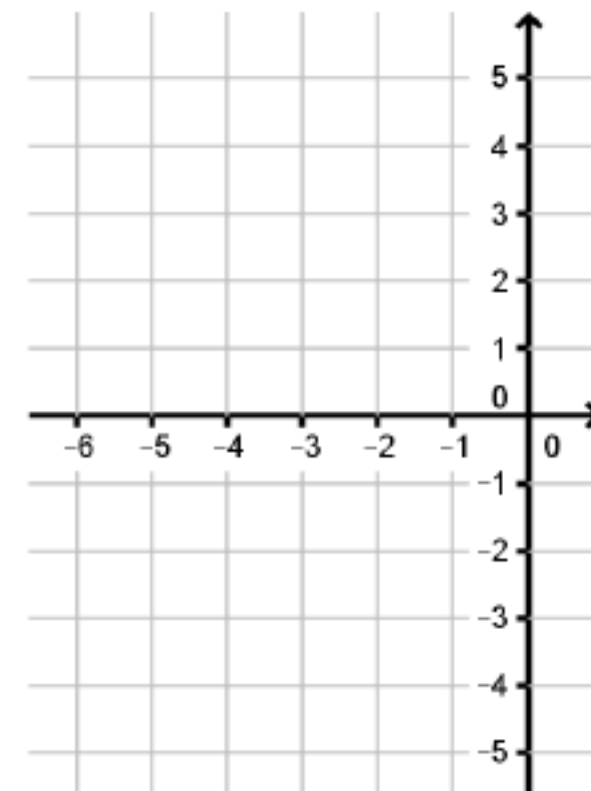
Opens up or down?

Slope to point one unit from the vertex is $\underline{\hspace{2cm}}$.y-intercept: $(0, \underline{\hspace{1cm}})$ 

2] $y = -(x + 3)^2 + 5$

Axis of Symmetry is $x = \underline{\hspace{2cm}}$ Vertex: $(\underline{\hspace{1cm}}, \underline{\hspace{1cm}})$

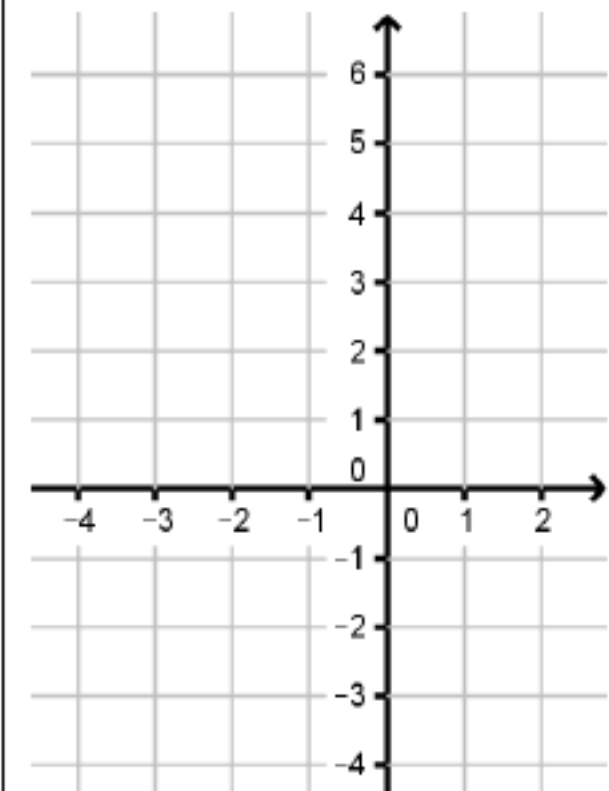
Opens up or down?

Slope to point one unit from the vertex is $\underline{\hspace{2cm}}$.y-intercept: $(0, \underline{\hspace{1cm}})$ 

3] $y = 2(x + 1)^2 - 3$

Axis of Symmetry is $x = \underline{\hspace{2cm}}$ Vertex: $(\underline{\hspace{1cm}}, \underline{\hspace{1cm}})$

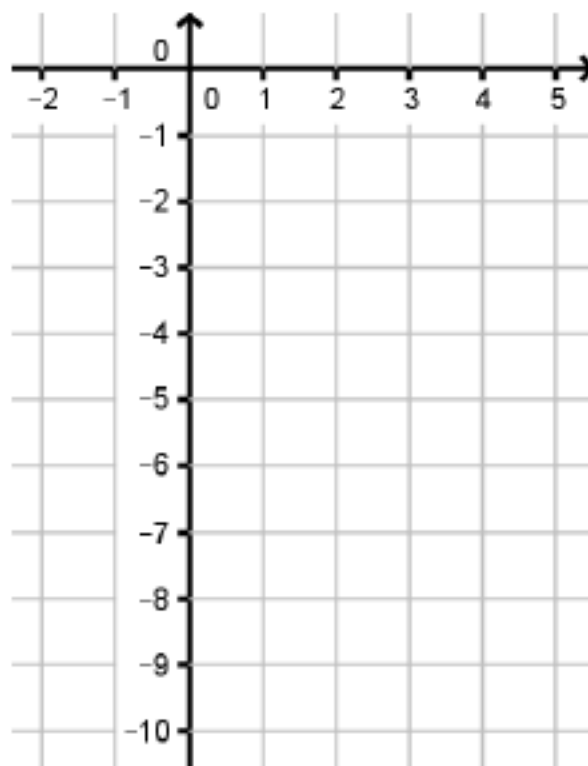
Opens up or down?

Slope to point one unit from the vertex is $\underline{\hspace{2cm}}$.y-intercept: $(0, \underline{\hspace{1cm}})$ 

4] $y = -2(x - 2)^2 - 1$

Axis of Symmetry is $x = \underline{\hspace{2cm}}$ Vertex: $(\underline{\hspace{1cm}}, \underline{\hspace{1cm}})$

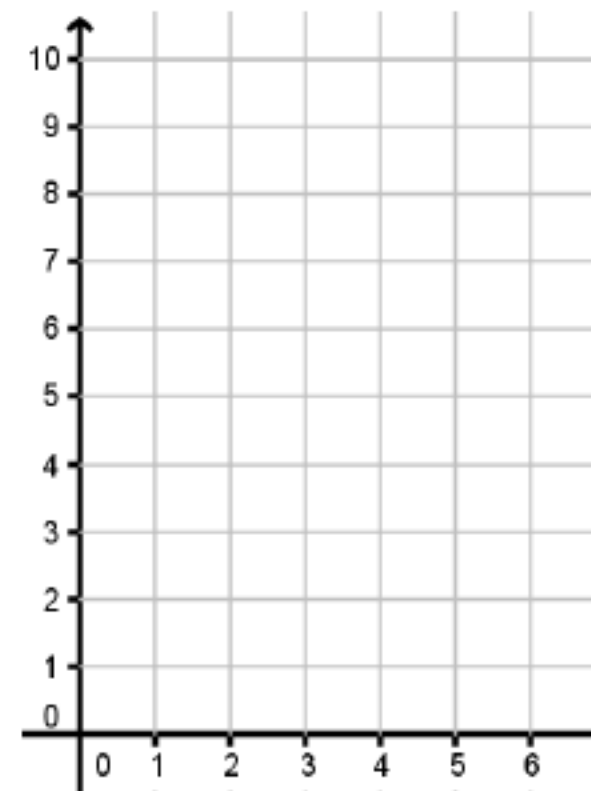
Opens up or down?

Slope to point one unit from the vertex is $\underline{\hspace{2cm}}$.y-intercept: $(0, \underline{\hspace{1cm}})$ 

5] $y = \frac{1}{2}(x - 3)^2 + 2$

Axis of Symmetry is $x = \underline{\hspace{2cm}}$ Vertex: $(\underline{\hspace{1cm}}, \underline{\hspace{1cm}})$

Opens up or down?

Slope to point one unit from the vertex is $\underline{\hspace{2cm}}$.y-intercept: $(0, \underline{\hspace{1cm}})$ 

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

Axis of Symmetry is $x = \underline{\hspace{2cm}}$ Vertex: $(\underline{\hspace{1cm}}, \underline{\hspace{1cm}})$

Opens up or down?

Slope to point one unit from the vertex is $\underline{\hspace{2cm}}$.y-intercept: $(0, \underline{\hspace{1cm}})$ 