

8.4 Worksheet #1

Name: _____

Date: _____

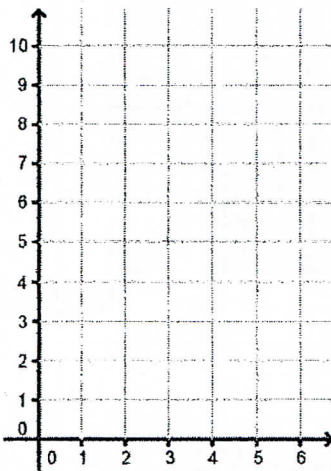
Period: _____

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.

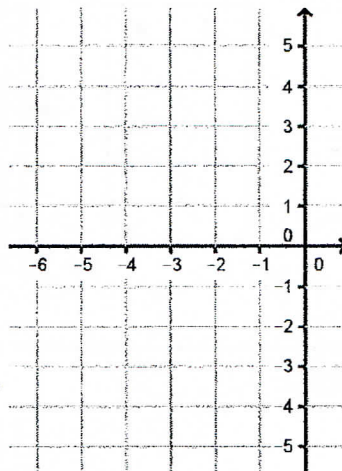
1] $y = (x - 3)^2$
 Axis of Symmetry is $x =$ _____
 Vertex: (____, ____)
 Opens up or down?

y-intercept: (0, _____)



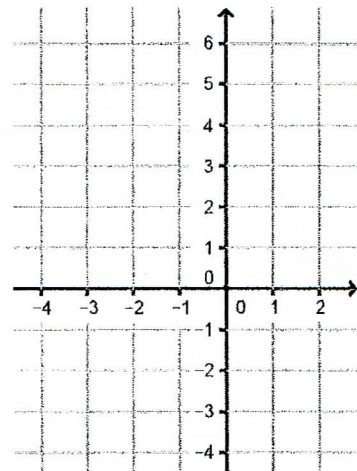
2] $y = -(x + 3)^2 + 5$
 Axis of Symmetry is $x =$ _____
 Vertex: (____, ____)
 Opens up or down?

y-intercept: (0, _____)



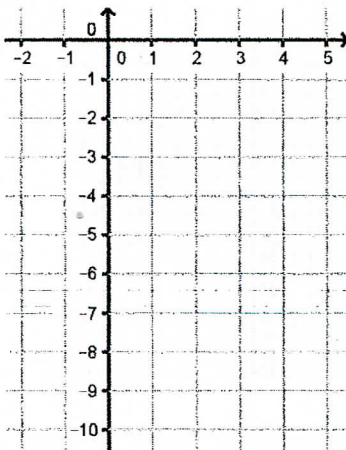
3] $y = 2(x + 1)^2 - 3$
 Axis of Symmetry is $x =$ _____
 Vertex: (____, ____)
 Opens up or down?

y-intercept: (0, _____)



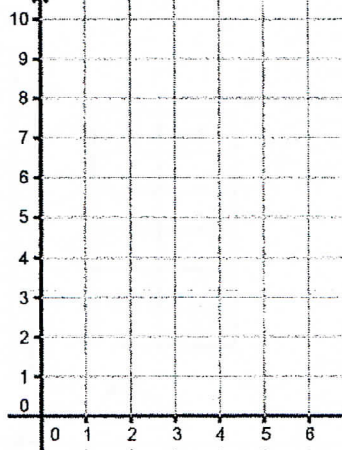
4] $y = -2(x - 2)^2 - 1$
 Axis of Symmetry is $x =$ _____
 Vertex: (____, ____)
 Opens up or down?

y-intercept: (0, _____)



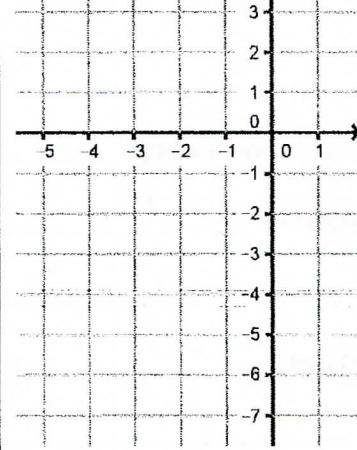
5] $y = \frac{1}{2}(x - 3)^2 + 2$
 Axis of Symmetry is $x =$ _____
 Vertex: (____, ____)
 Opens up or down?

y-intercept: (0, _____)



6] $y = -\frac{1}{4}(x + 2)^2 + 1$
 Axis of Symmetry is $x =$ _____
 Vertex: (____, ____)
 Opens up or down?

y-intercept: (0, _____)



Quadratic Equations in Vertex Form

What is vertex form? $y = a(x - h)^2 + k$ where (h, k) is the vertex of the parabola.

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

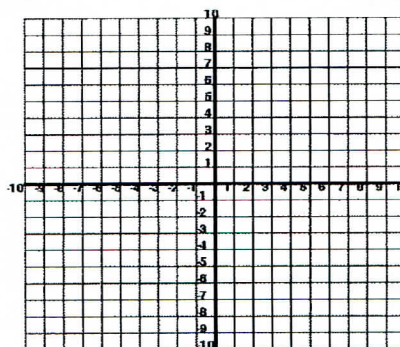
Axis of Symmetry: _____

Vertex: _____

Domain: _____

Range: _____

x	y



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

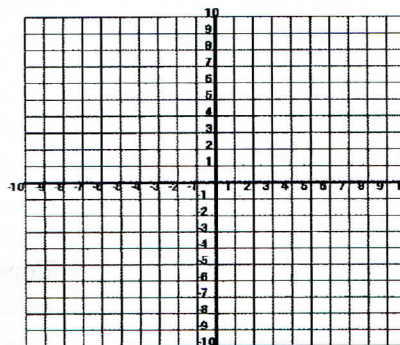
Axis of Symmetry: _____

Vertex: _____

Domain: _____

Range: _____

x	y



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

Axis of Symmetry: _____

Vertex: _____

Domain: _____

Range: _____

x	y

