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.

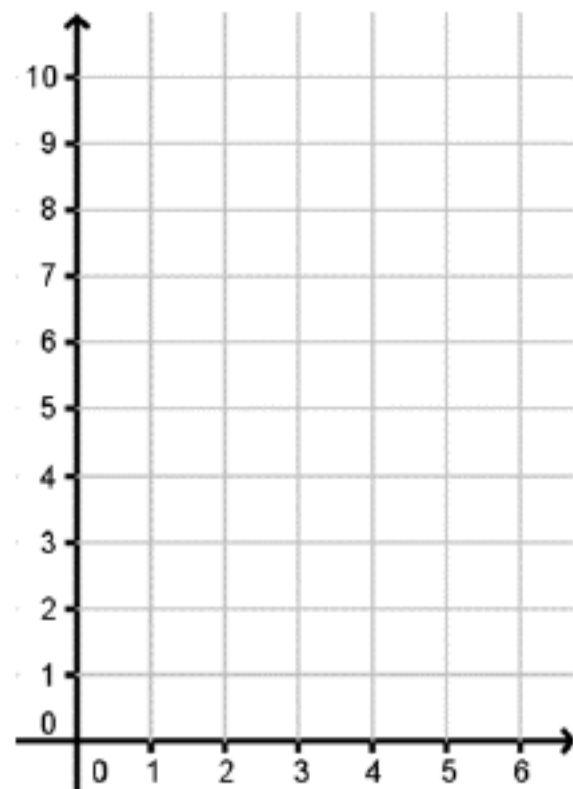|		
1] $y = (x - 3)^2$ Axis of Symmetry is x=_____ Vertex: (____, ____) Opens up or down? Slope to point one unit from the vertex is _____. y-intercept: (0,_____)	2] $y = -(x + 3)^2 + 5$ Axis of Symmetry is x=_____ Vertex: (____, ____) Opens up or down? Slope to point one unit from the vertex is _____. y-intercept: (0,_____)	3] $y = 2(x + 1)^2 - 3$ Axis of Symmetry is x=_____ Vertex: (____, ____) Opens up or down? Slope to point one unit from the vertex is _____. y-intercept: (0,_____)
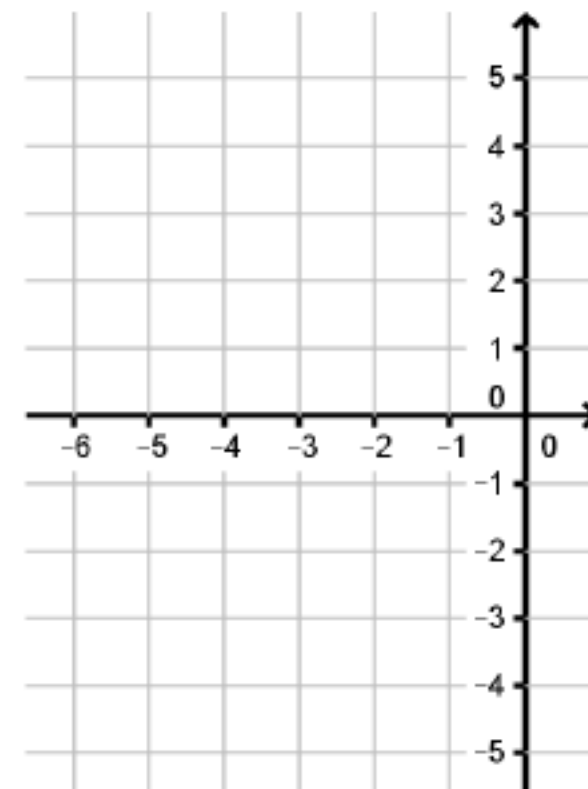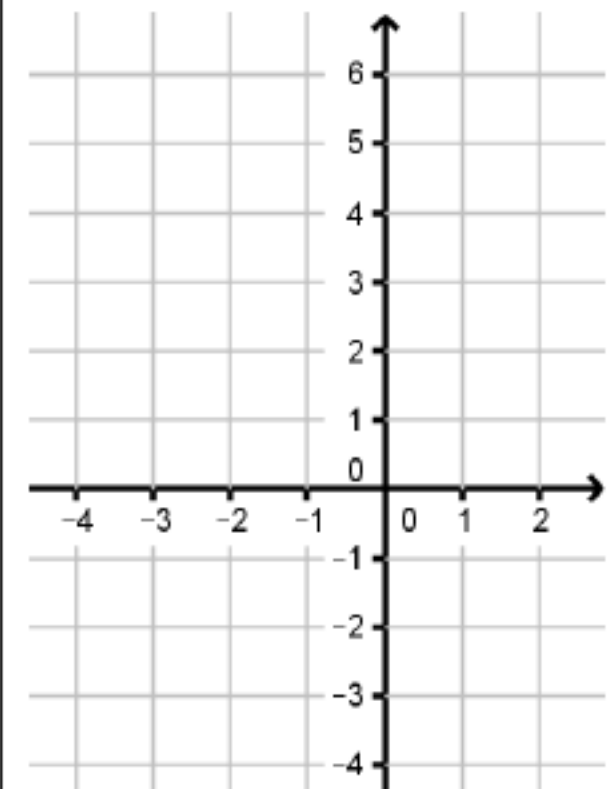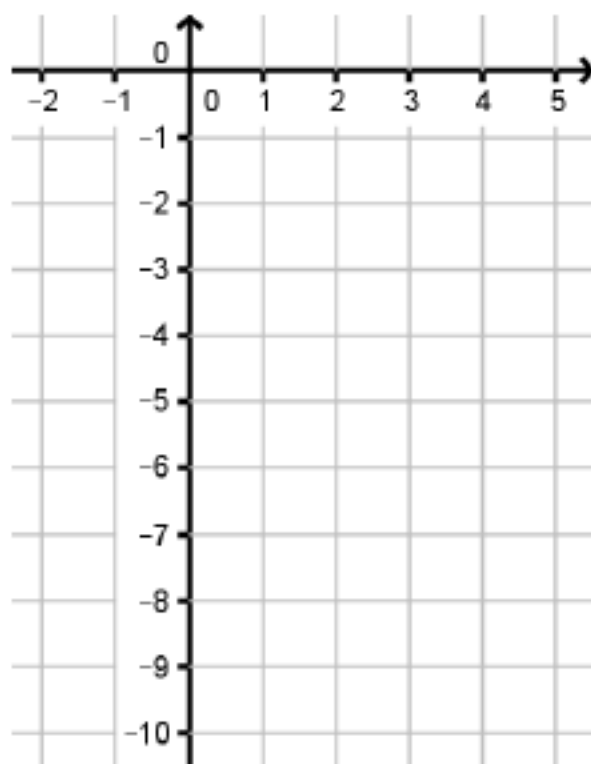
4] $y = -2(x - 2)^2 - 1$ Axis of Symmetry is x=_____ Vertex: (____, ____) Opens up or down? Slope to point one unit from the vertex is _____. y-intercept: (0,_____)	5] $y = \frac{1}{2}(x - 3)^2 + 2$ Axis of Symmetry is x=_____ Vertex: (____, ____) Opens up or down? Slope to point one unit from the vertex is _____. y-intercept: (0,_____)	6] $y = -\frac{1}{4}(x + 2)^2 + 1$ Axis of Symmetry is x=_____ Vertex: (____, ____) Opens up or down? Slope to point one unit from the vertex is _____. y-intercept: (0,_____)