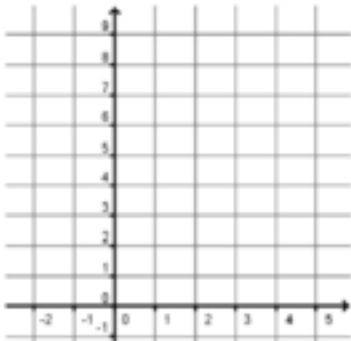
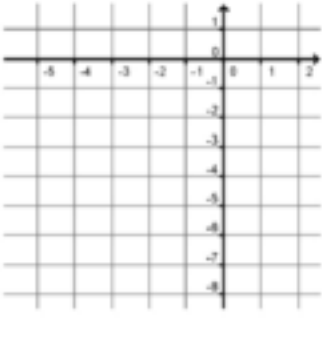
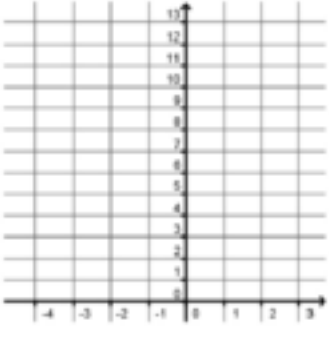


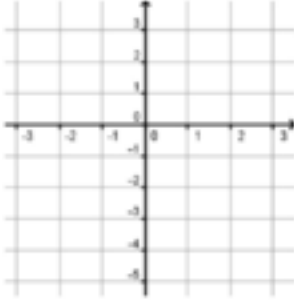
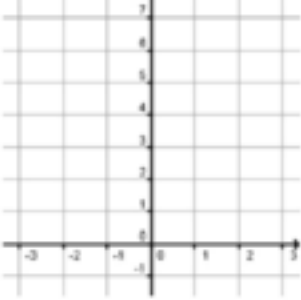
Name: Date: Period:

Practice Worksheet: Graphing Quadratic Functions in Standard Form

- 1] For any quadratic of the form $y = ax^2 + c$, the axis of symmetry is always the line _____.
- 2] If the axis of symmetry of a quadratic is $x = 2$ and $(-1, 3)$ is on the graph, then the point (____, ____) must also be on the graph.
- 3] For any quadratic of the form $y = ax^2 + c$, the y-intercept is always the same point as the _____.
- 4] The graph of $y = 2x^2 + 4x + 3$ passes through the point $(1, \text{_____})$ and $(-1, \text{_____})$.

For #5-12, label the axis of symmetry, vertex, y-intercept, and at least three more points on the graph.

5] $y = x^2 - 4x + 8$ $a = \quad b = \quad c =$ Opens up or down? Is vertex a max or min? y-intercept: Axis of Symmetry is $x = \text{_____}$ Vertex: (____, ____) 	6] $y = 2x^2 + 8x$ $a = \quad b = \quad c =$ Opens up or down? Is vertex a max or min? y-intercept: Axis of Symmetry is $x = \text{_____}$ Vertex: (____, ____) 	7] $y = -3x^2 - 12x + 1$ $a = \quad b = \quad c =$ Opens up or down? Is vertex a max or min? y-intercept: Axis of Symmetry is $x = \text{_____}$ Vertex: (____, ____) 
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8] $y = -\frac{3}{2}x^2 + 3$ $a = \quad b = \quad c =$ Opens up or down? Is vertex a max or min? y-intercept: $(0, \text{____})$ Axis of Symmetry is $x = \text{_____}$ Vertex: (____, ____)  Find the coordinates $(2, \text{_____})$ and $(-2, \text{_____})$ to guide the shape of the parabola.	9] $y = 2x^2 - 1$ $a = \quad b = \quad c =$ Opens up or down? Is vertex a max or min? y-intercept: $(0, \text{____})$ Axis of Symmetry is $x = \text{_____}$ Vertex: (____, ____)  Find the coordinates $(2, \text{_____})$ and $(-2, \text{_____})$ to guide the shape of the parabola.
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