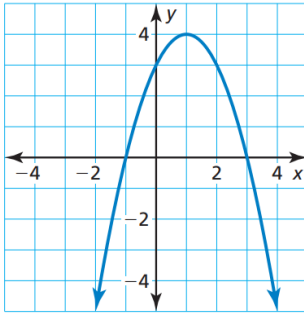


Graphing Quadratics in Standard Form $y = ax^2 + bx + c$ and Vertex form $y = a(x - h)^2 + k$

In problems 1 & 2. Identify the axis of symmetry, the vertex and determine if the vertex is a minimum or maximum.

1)

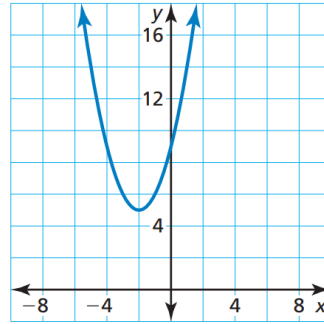


Axis of Symmetry: _____

Vertex: _____

Min or Max: _____

2)



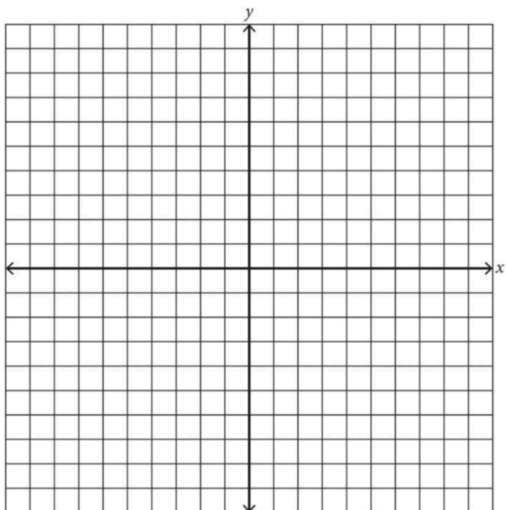
Axis of Symmetry: _____

Vertex: _____

Min or Max: _____

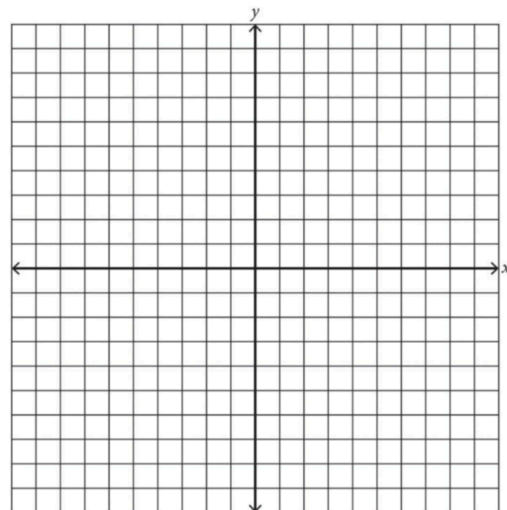
Graph the function. Compare the function to the parent function $f(x) = x^2$ (list the transformations).

3) $h(x) = -3x^2$



Transformations: _____

4) $p(x) = \frac{1}{2}x^2 + 2$



Transformations: _____

Determine the Axis of Symmetry, the Vertex, and the y-intercept. Then graph each function.

5) $g(x) = -2x^2 - 4x + 7$

6) $r(x) = x^2 + 4x + 5$

Axis of Symmetry:

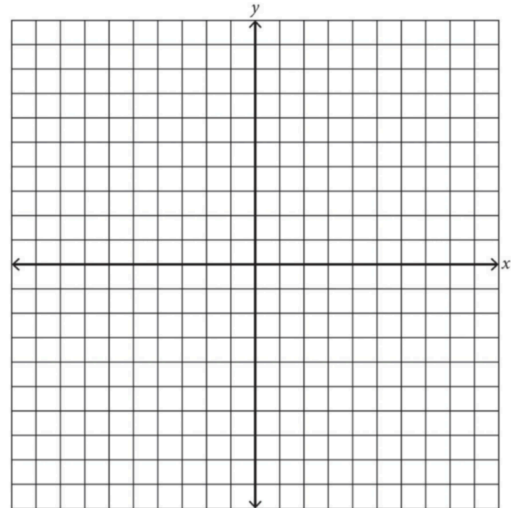
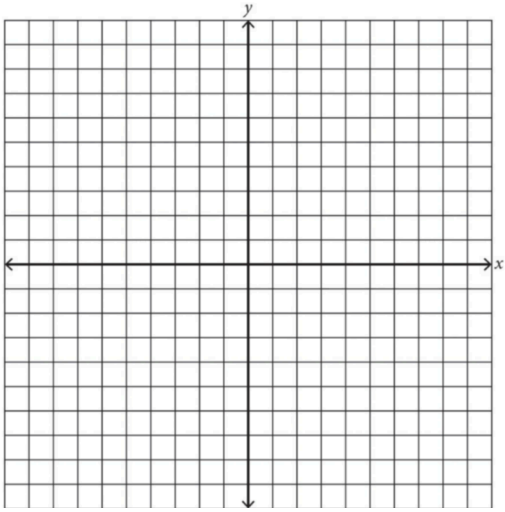
Axis of Symmetry:

Vertex:

y- intercept:

Vertex:

y- intercept:



Domain:

Range:

Domain:

Range:

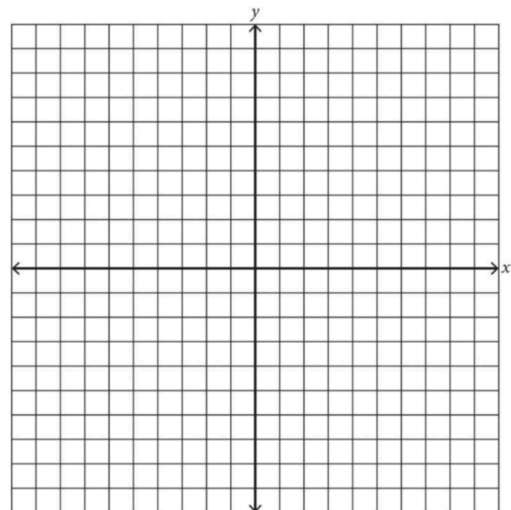
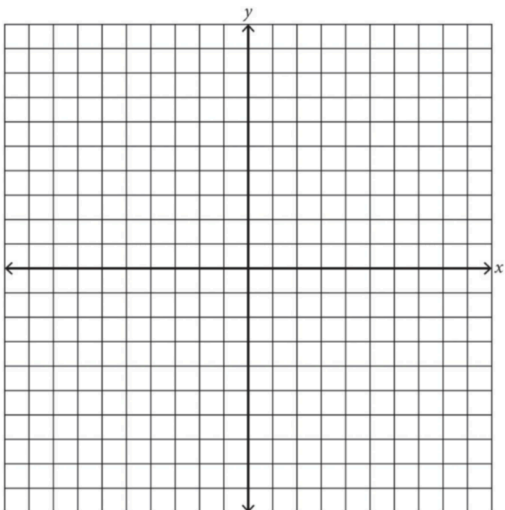
Name the Vertex, Graph the function. Compare the function to the parent function $f(x) = x^2$ (list the transformations).

7) $g(x) = \frac{1}{2}(x - 2)^2 - 4$

8) $h(x) = -3(x + 5)^2 + 6$

Vertex:

Vertex:



Transformations:

Transformations: