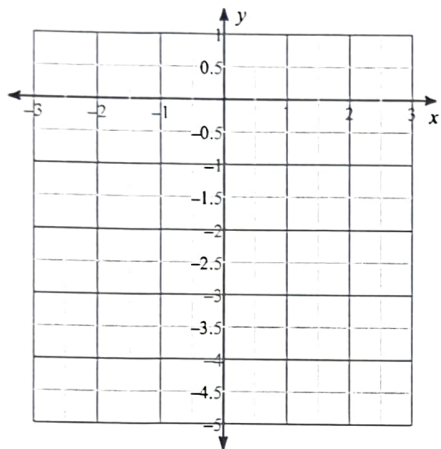


# HW - Graphing Quadratic Functions in Vertex Form

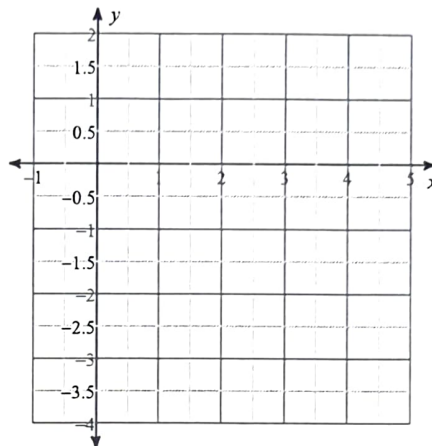
Sketch the graph of each function.

1)  $y = -x^2$



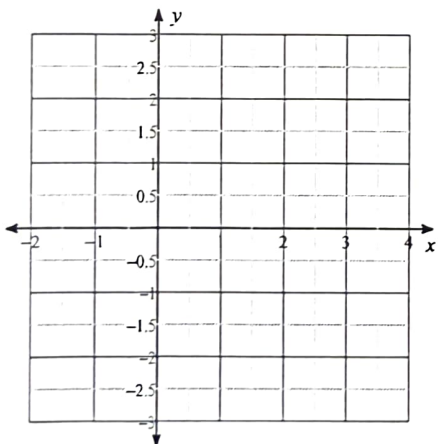
vertex: \_\_\_\_\_ a= \_\_\_\_\_  
 domain: \_\_\_\_\_ range: \_\_\_\_\_  
 axis of symmetry: \_\_\_\_\_  
 increasing on: \_\_\_\_\_  
 decreasing on: \_\_\_\_\_

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



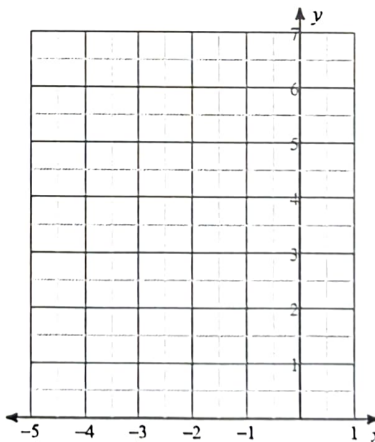
vertex: \_\_\_\_\_ a= \_\_\_\_\_  
 vertical shift: \_\_\_\_\_  
 horizontal shift: \_\_\_\_\_  
 width: \_\_\_\_\_  
 reflected? \_\_\_\_\_

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



vertex: \_\_\_\_\_ a= \_\_\_\_\_  
 domain: \_\_\_\_\_ range: \_\_\_\_\_  
 axis of symmetry: \_\_\_\_\_  
 increasing on: \_\_\_\_\_  
 decreasing on: \_\_\_\_\_

4)  $y = (x + 1)^2 + 2$



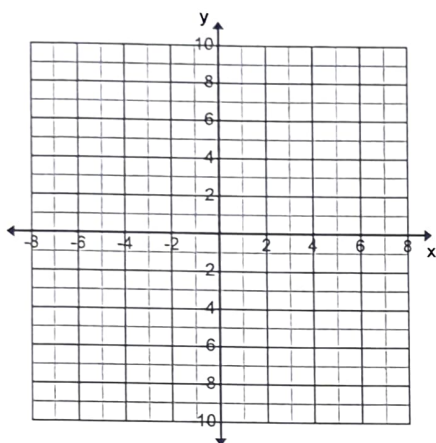
vertex: \_\_\_\_\_ a= \_\_\_\_\_  
 vertical shift: \_\_\_\_\_  
 horizontal shift: \_\_\_\_\_  
 width: \_\_\_\_\_  
 reflected? \_\_\_\_\_

# Graphing Quadratic Functions in Standard Form Worksheet #1

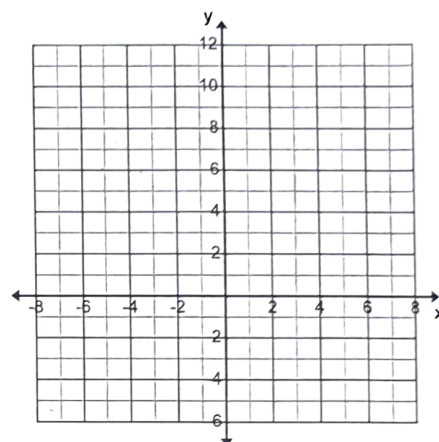
Name: \_\_\_\_\_ Period \_\_\_\_\_ Date \_\_\_\_\_

Directions: Graph these equations. Identify the axis of symmetry, vertex, and y-intercept.

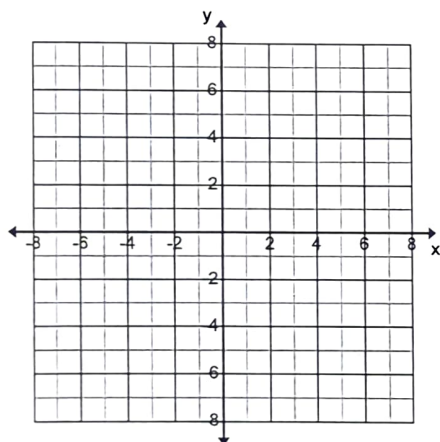
1.)  $y = x^2 - 2x - 3$



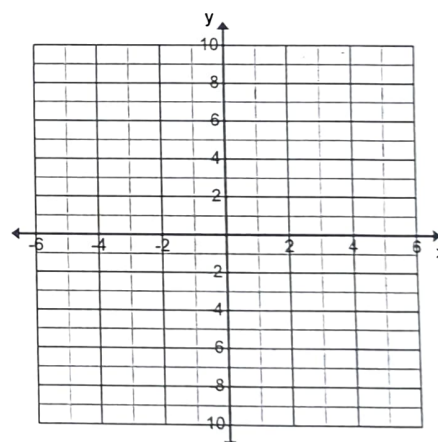
2.)  $y = 3x^2 + 12x + 9$



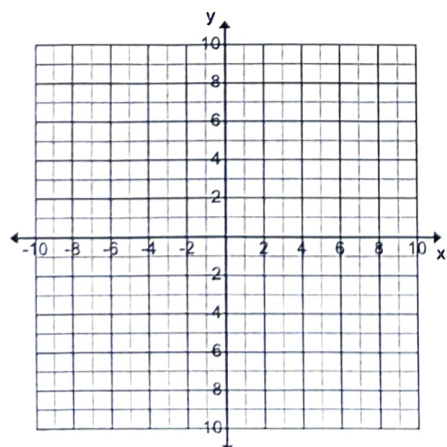
3.)  $y = -x^2 + 6x - 4$



4.)  $y = -4x^2 + 8$



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



6.)  $y = 2x^2 - 2x - 5$

