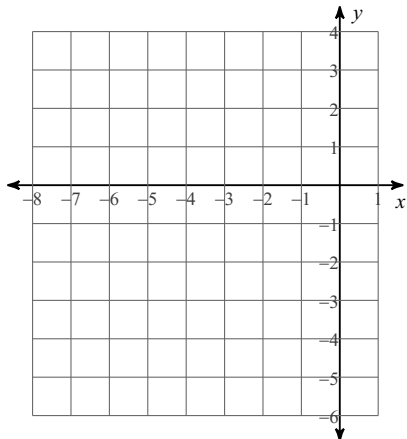


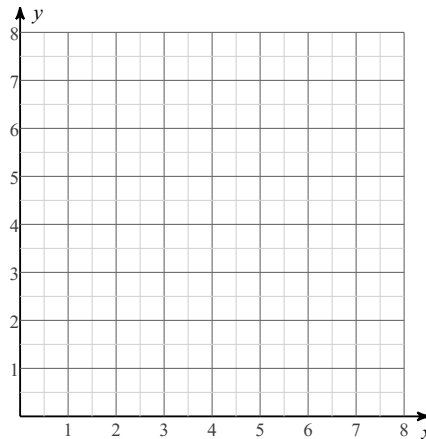
Review

Sketch the graph of each function. Identify the vertex and the axis of symmetry.

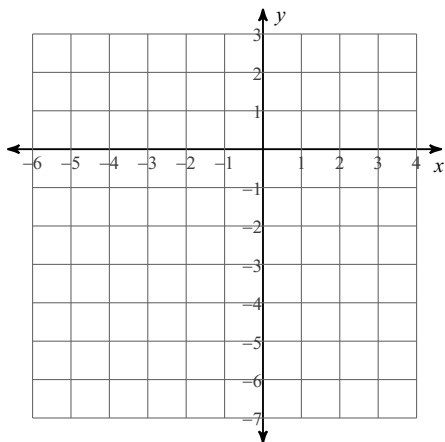
1)  $y = -2(x + 4)^2 + 3$



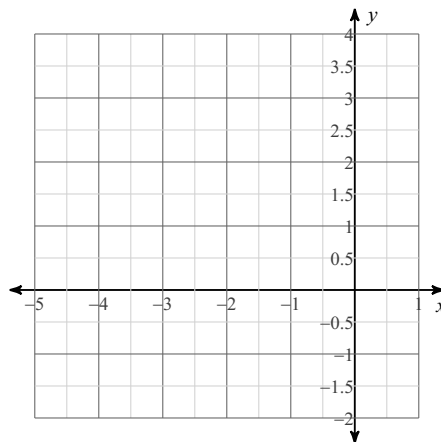
2)  $y = (x - 3)^2 + 3$



3)  $y = -2x^2 - 4x$

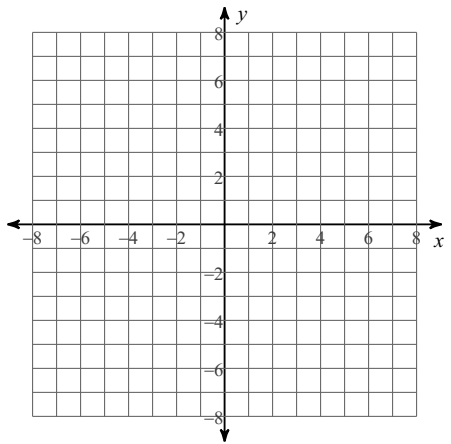


4)  $y = x^2 + 6x + 8$

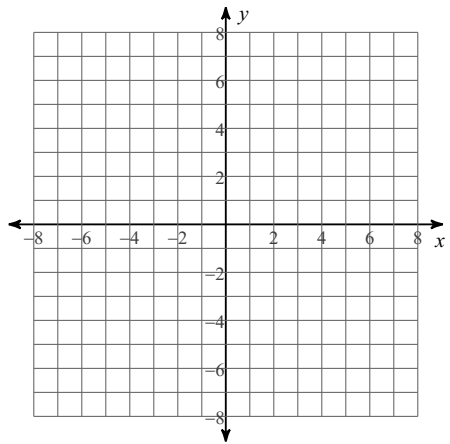


Identify the vertex and axis of symmetry of each. Then sketch the graph.

5)  $y = x^2 + 6x + 9$

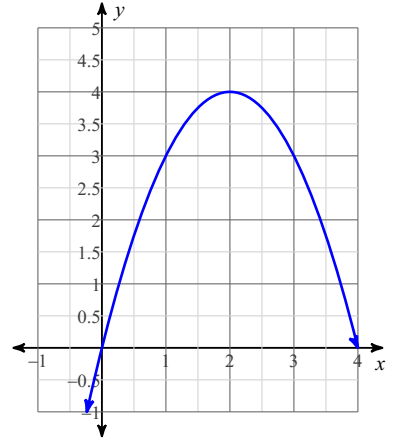


6)  $y = -x^2 - 12x - 36$

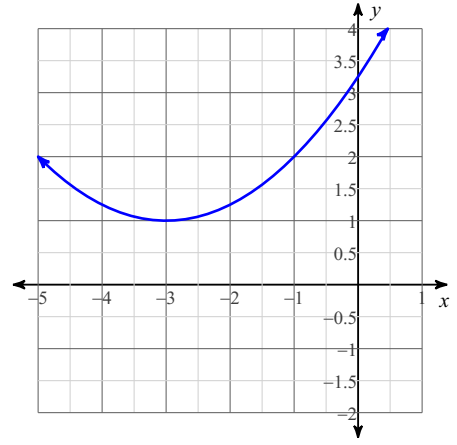


Use the information provided to write the vertex form equation of each parabola.

7)

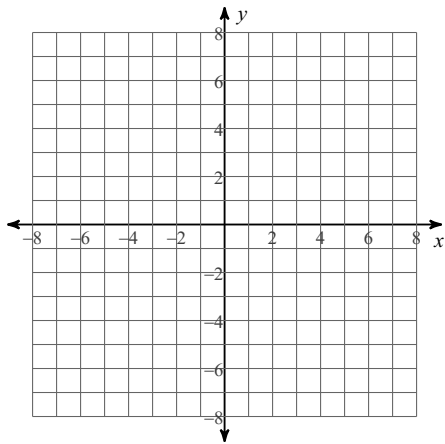


8)

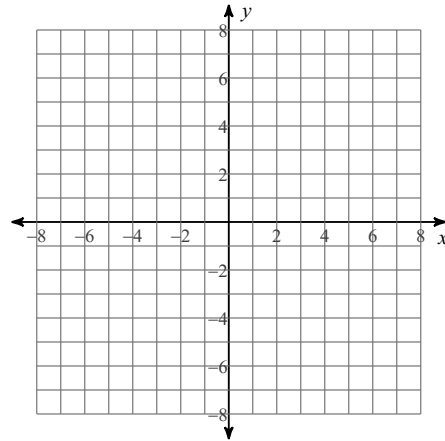


Identify the vertex and axis of symmetry of each. Then sketch the graph.

9)  $y = -(x - 5)^2$



10)  $y = \frac{1}{3}(x - 2)^2$



Describe the Transformation.

11)  $y = \frac{1}{2}(x + 4)^2 - 1$

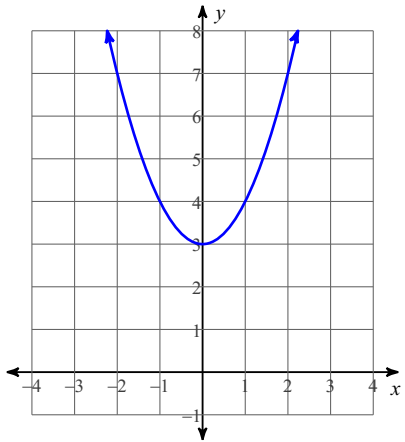
12)  $y = -\frac{1}{3}(x - 1)^2 - 5$

13)  $y = (x - 6)^2 - 2$

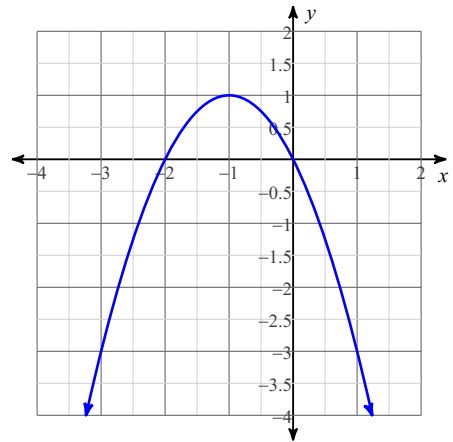
14)  $y = -(x + 1)^2 + 1$

Answer the following information given these graphs. Domain, Range, Intercepts, Increase, Decrease, Extrema, and End Behavior.

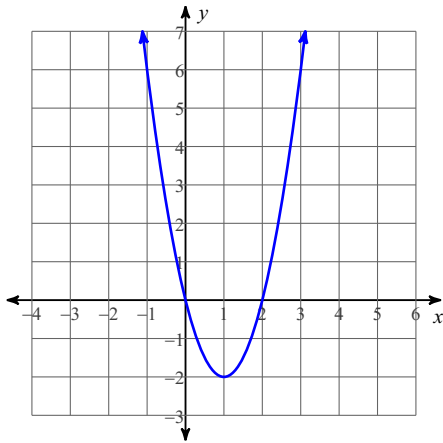
15)



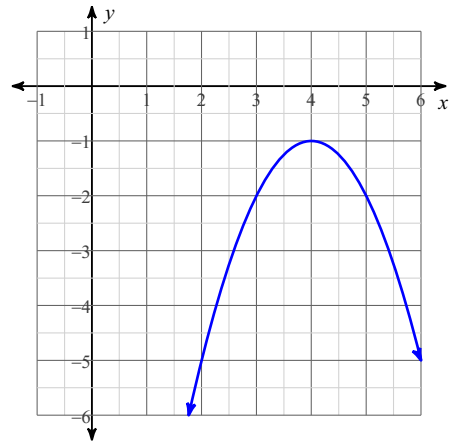
16)



17)

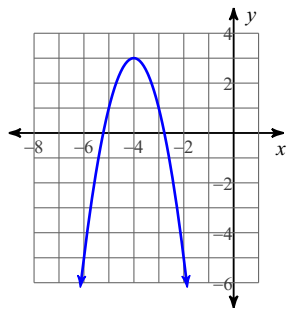


18)

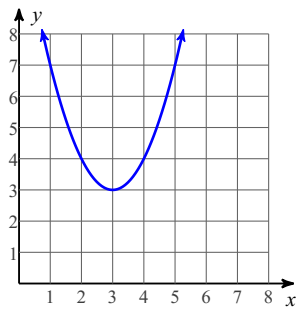


# Answers to Review (ID: 1)

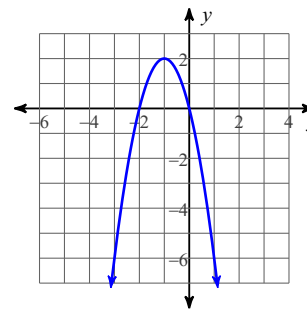
1)



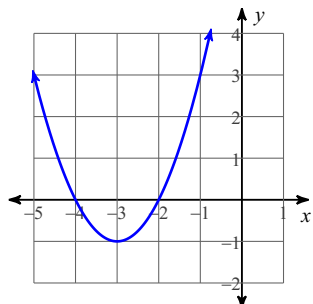
2)



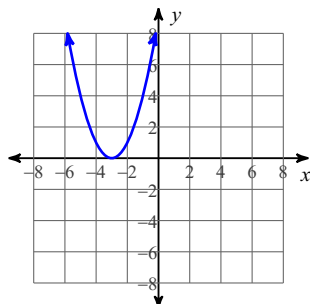
3)



4)

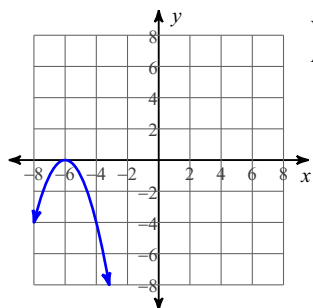


5)



Vertex:  $(-3, 0)$   
Axis of Sym.:  $x = -3$

6)

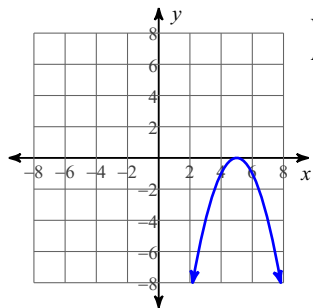


Vertex:  $(-6, 0)$   
Axis of Sym.:  $x = -6$

7)  $y = -(x - 2)^2 + 4$

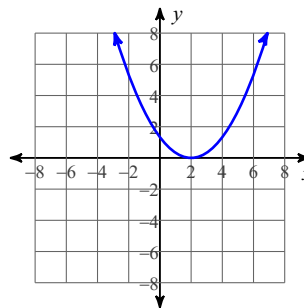
8)  $y = \frac{1}{4}(x + 3)^2 + 1$

9)



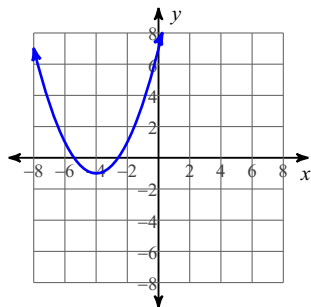
Vertex:  $(5, 0)$   
Axis of Sym.:  $x = 5$

10)

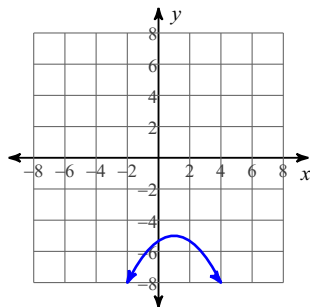


Vertex:  $(2, 0)$   
Axis of Sym.:  $x = 2$

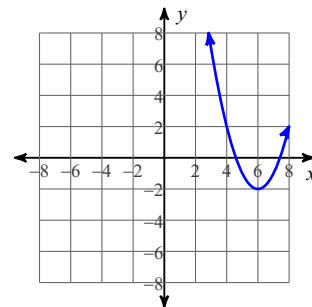
11)



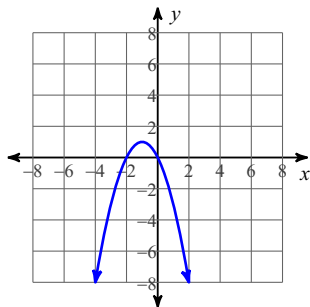
12)



13)



14)



15)  $y = x^2 + 3$

16)  $y = -(x + 1)^2 + 1$

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

18)  $y = -(x - 4)^2 - 1$