

SM2-A HW #5.1 (xfrm Quad. Function)

Period _____

- 1) Compare the following equation to the parent function for quadratics $y = x^2$.
- Give the location of the vertex (x,y).
 - Identify the transformations that have been applied to the parent function.

$$y = 2x^2$$

- 2) Compare the following equation to the parent function for quadratics $y = x^2$.
- Give the location of the vertex (x,y).
 - Identify the transformations that have been applied to the parent function.

$$y = x^2 - 5$$

- 3) Compare the following equation to the parent function for quadratics $y = x^2$.
- Give the location of the vertex (x,y).
 - Identify the transformations that have been applied to the parent function.

$$y = 3x^2 + 2$$

- 4) Compare the following equation to the parent function for quadratics $y = x^2$.
- Give the location of the vertex (x,y).
 - Identify the transformations that have been applied to the parent function.

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

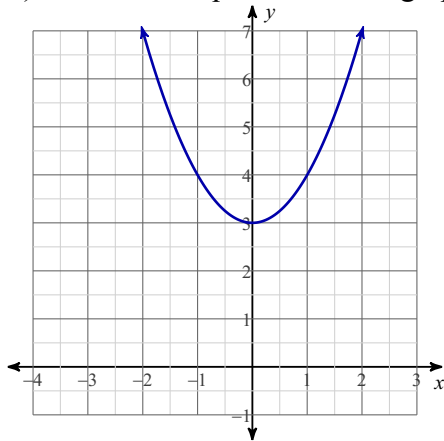
- 5) Compare the following equation to the parent function for quadratics $y = x^2$.
- Give the location of the vertex (x,y).
 - Identify the transformations that have been applied to the parent function.

$$y = -5x^2 + 4$$

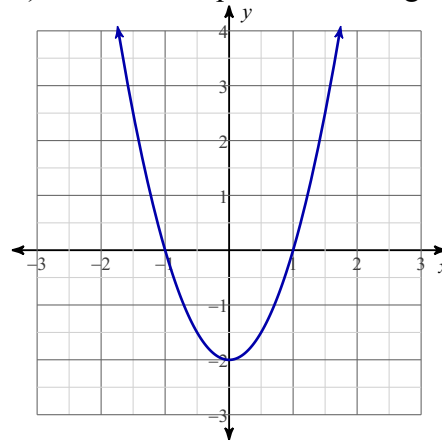
- 6) Compare the following equation to the parent function for quadratics $y = x^2$.
- Give the location of the vertex (x,y).
 - Identify the transformations that have been applied to the parent function.

$$y = 6(x + 3)^2 - 1$$

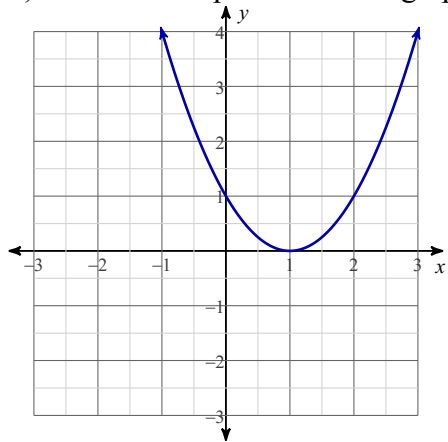
- 7) a) Identify the transformations that been applied to the parent function $y = x^2$
b) what is the equation for the graph?



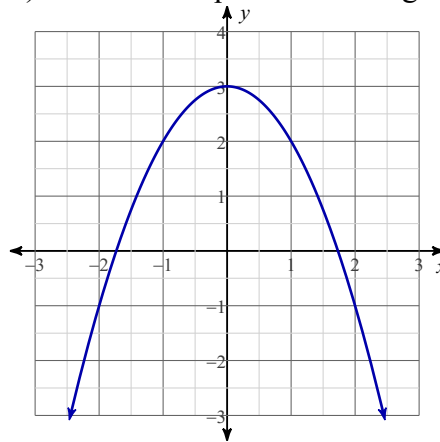
- 8) a) Identify the transformations that been applied to the parent function $y = x^2$
b) what is the equation for the graph?



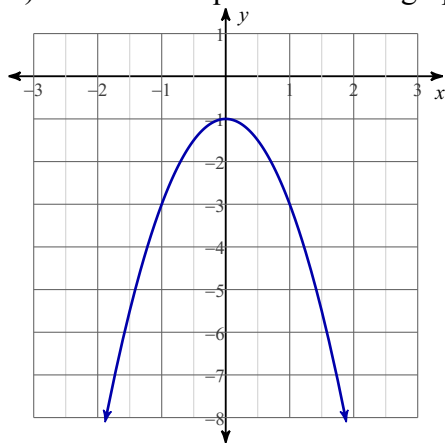
- 9) a) Identify the transformations that been applied to the parent function $y = x^2$
 b) what is the equation for the graph?



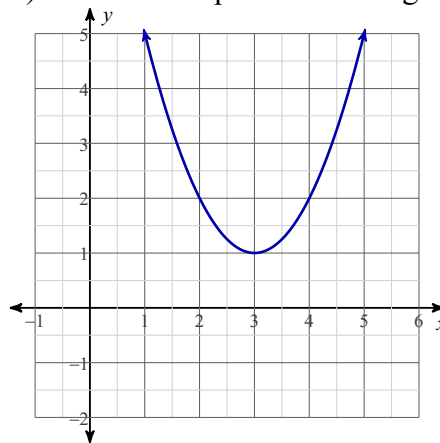
- 10) a) Identify the transformations that been applied to the parent function $y = x^2$
 b) what is the equation for the graph?



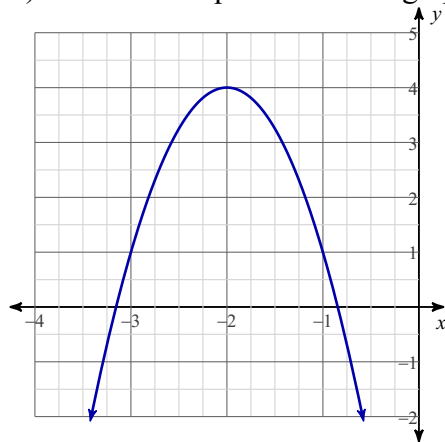
- 11) a) Identify the transformations that been applied to the parent function $y = x^2$
 b) what is the equation for the graph?



- 12) a) Identify the transformations that been applied to the parent function $y = x^2$
 b) what is the equation for the graph?



- 13) a) Identify the transformations that been applied to the parent function $y = x^2$
 b) what is the equation for the graph?



- 14) a) Identify the transformations that been applied to the parent function $y = x^2$
 b) what is the equation for the graph?

