

### More Transformations!

Graph the following functions using your knowledge about transformations. Identify the parent function and fill in the information that is asked.

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

Parent Function: \_\_\_\_\_

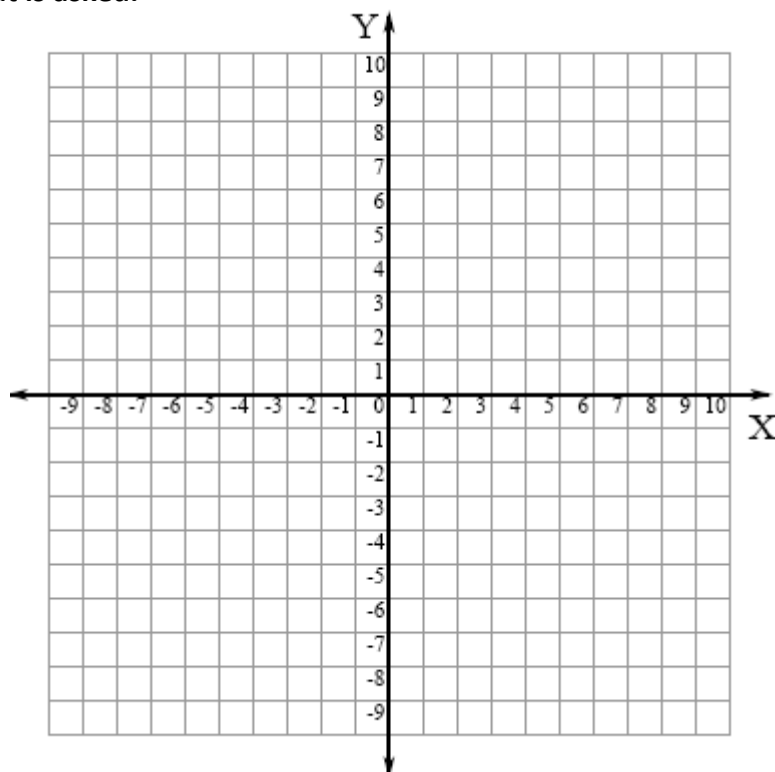
Domain: \_\_\_\_\_

Range: \_\_\_\_\_

Vertex: \_\_\_\_\_

Increasing: \_\_\_\_\_

Decreasing: \_\_\_\_\_



2)  $y = 2\sqrt{x - 2} + 2$

Parent Function: \_\_\_\_\_

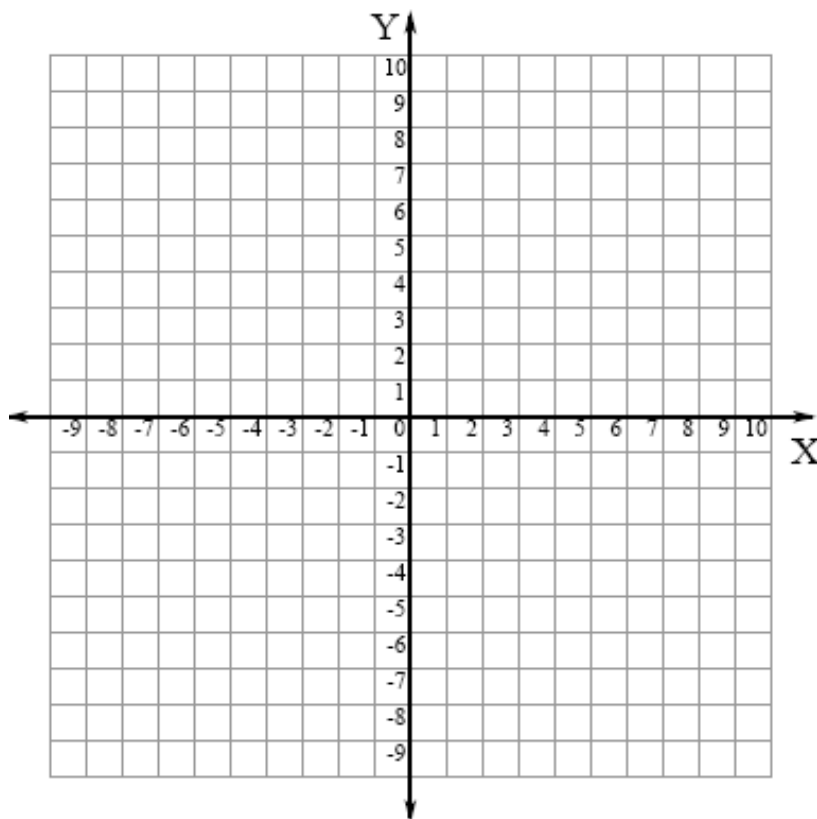
Domain: \_\_\_\_\_

Range: \_\_\_\_\_

Vertex: \_\_\_ NA \_\_\_\_\_

Increasing: \_\_\_\_\_

Decreasing: \_\_\_\_\_



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

Parent Function: \_\_\_\_\_

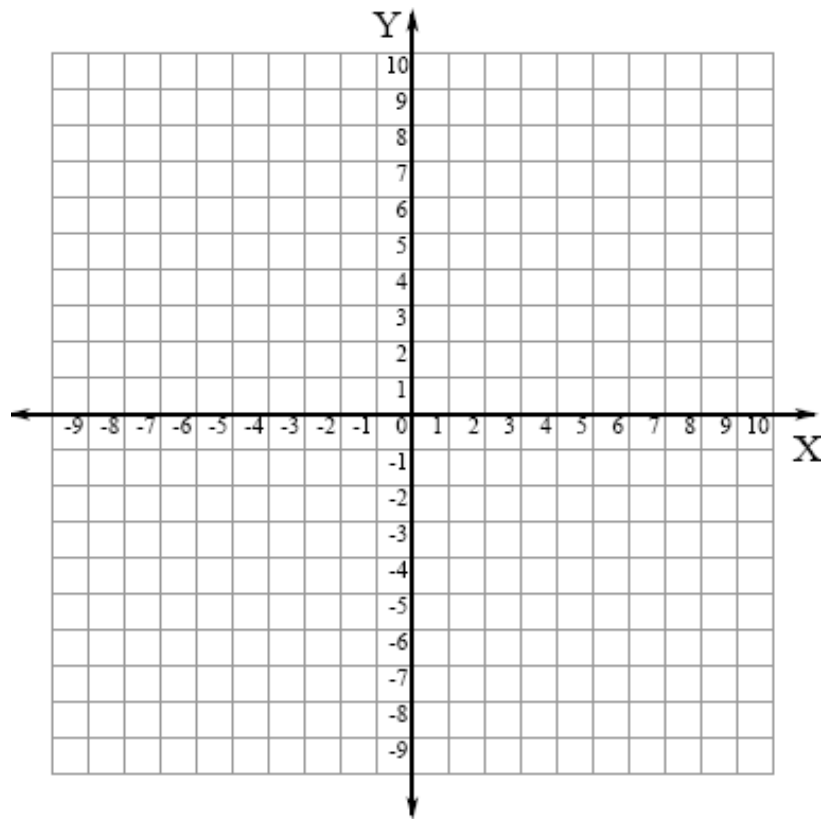
Domain: \_\_\_\_\_

Range: \_\_\_\_\_

Vertex: \_\_\_\_\_

Increasing: \_\_\_\_\_

Decreasing: \_\_\_\_\_



4)  $y = 2|x + 2| + 2$

Parent Function: \_\_\_\_\_

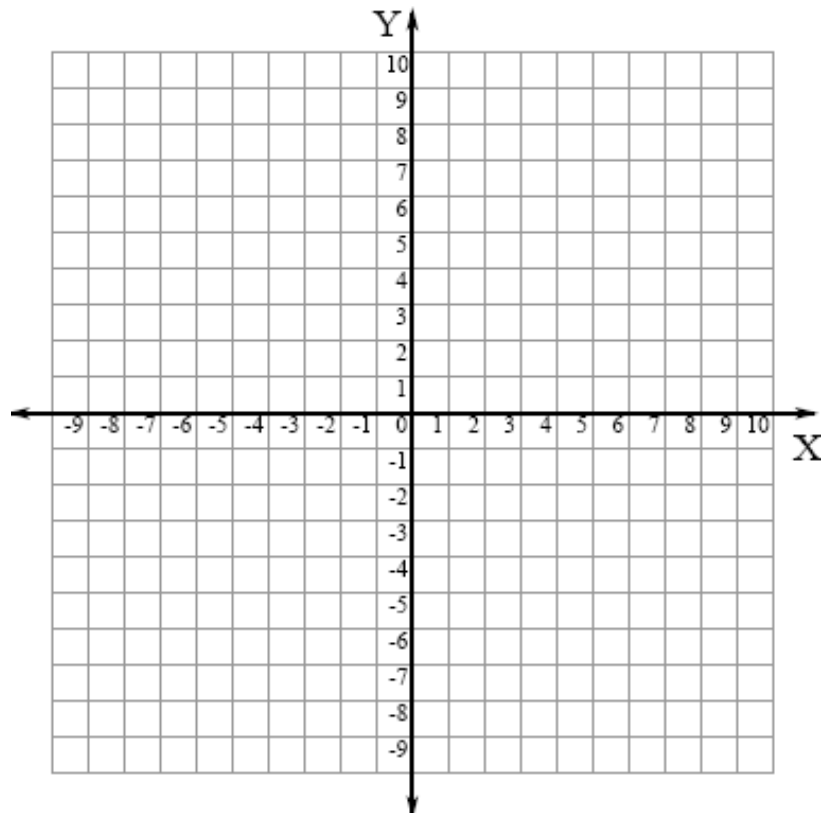
Domain: \_\_\_\_\_

Range: \_\_\_\_\_

Vertex: \_\_\_\_\_

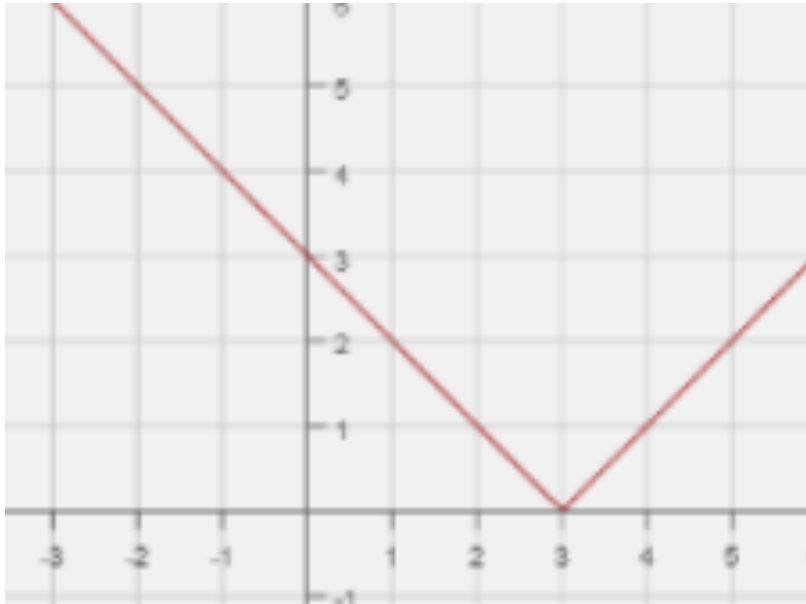
Increasing: \_\_\_\_\_

Decreasing: \_\_\_\_\_

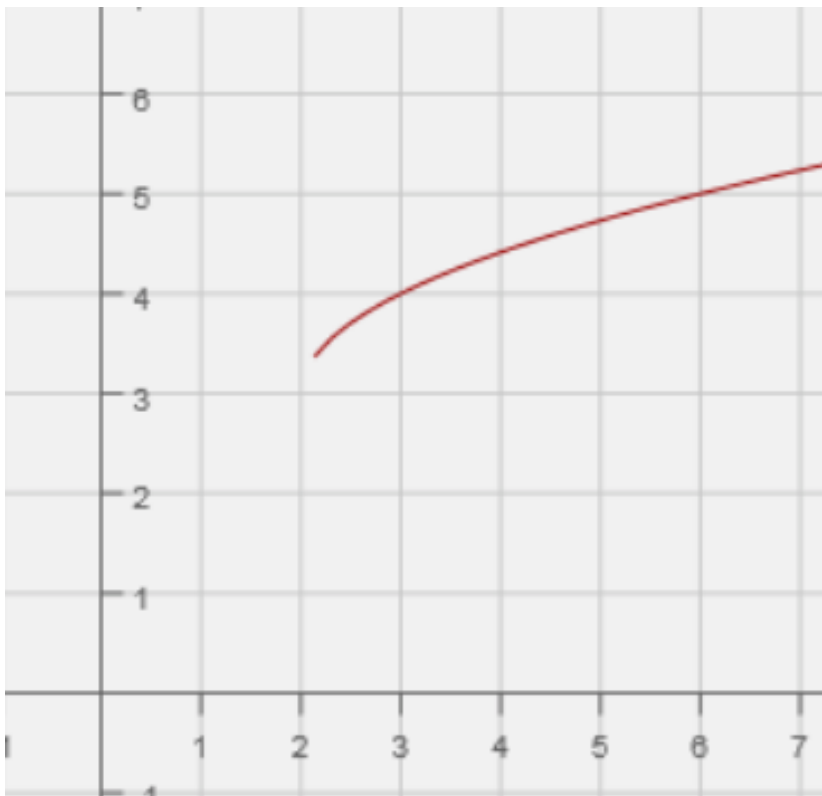


Give the equation of each function given the graph.

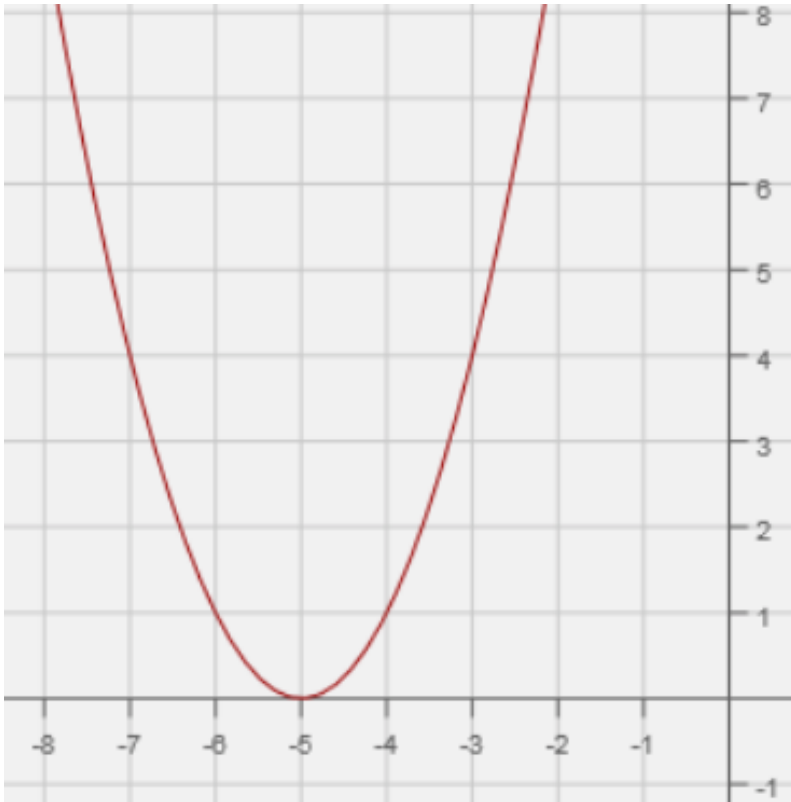
5)  $y =$  \_\_\_\_\_



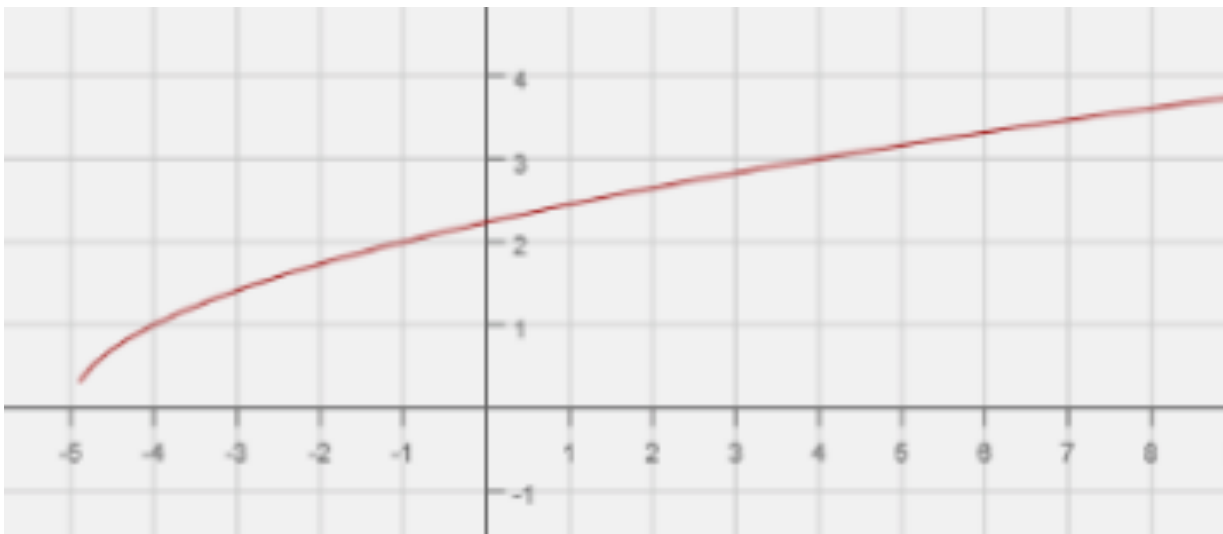
6)  $y =$  \_\_\_\_\_



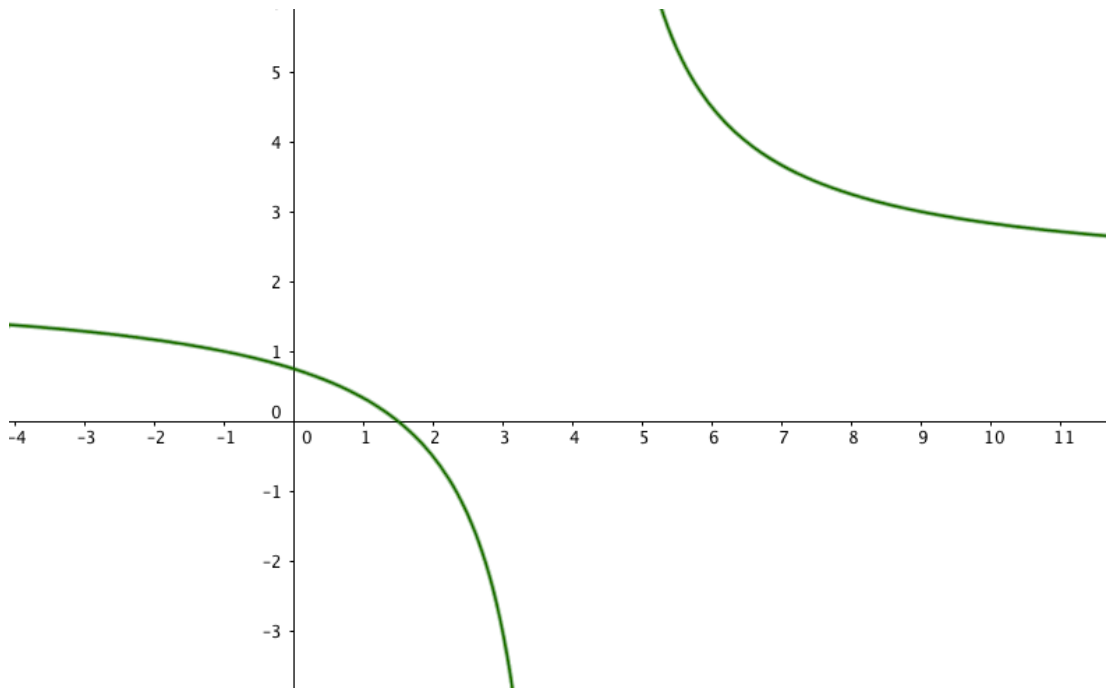
7)  $y =$  \_\_\_\_\_



8)  $y =$  \_\_\_\_\_



9)  $y =$  \_\_\_\_\_



10)  $y =$  \_\_\_\_\_

