5.3 WS - Graphing Radicals

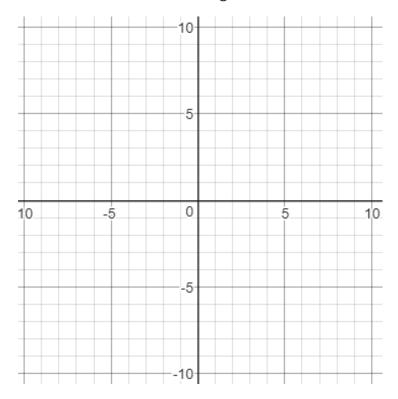
Graph each function and determine the domain and range.

 $y = \sqrt{x+3}$

Domain:

Range:

 $\begin{array}{ccc} & & & & \\ & h \ , k & \\ \alpha = & & \left(& , & \right) \end{array}$

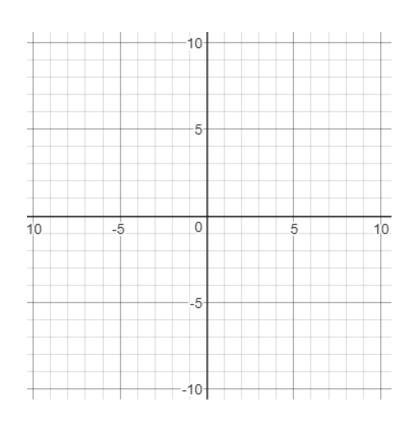


 $y = \sqrt{x} - 5$

Domain:

Range:

a = (,)



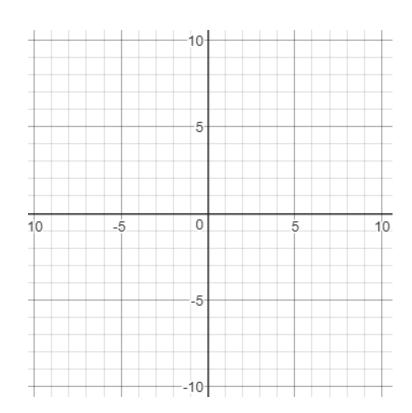
3)

$$y = 2\sqrt{x+4}$$

Domain:

Range:

$$\begin{array}{c} h \ , k \\ \alpha = \end{array} \hspace{1cm} \left(\begin{array}{c} , \end{array} \right)$$



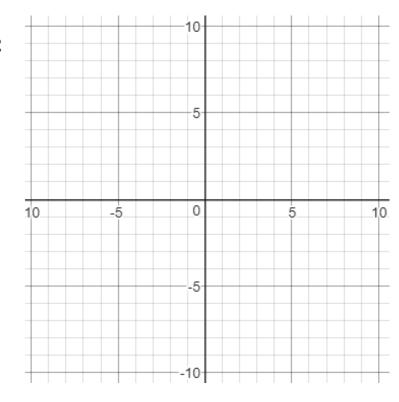
4)

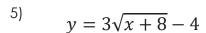
$$y = \frac{-1}{2}\sqrt{x+7} + 2$$

Domain:

Range:

$$\begin{array}{ccc} & & & & \\ & h \ , \, k & \\ \alpha = & & \left(& , & \right) \end{array}$$





Domain:

Range:

$$\begin{array}{ccc} & & & h \ , \, k \\ & & \end{array}$$

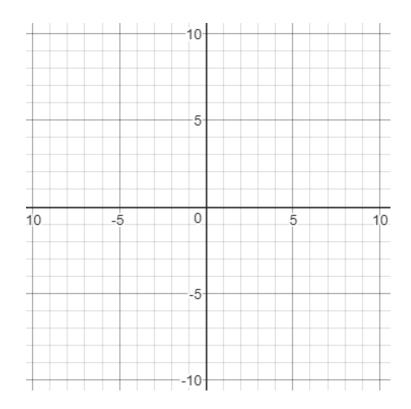
6)

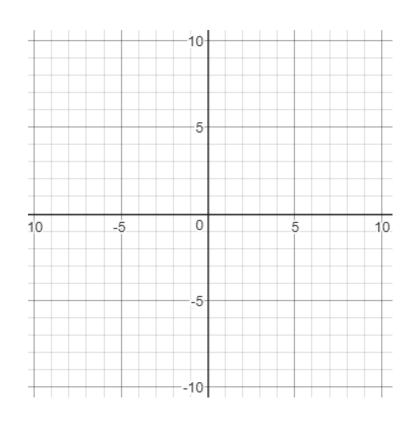
$$y = \frac{-1}{2}\sqrt{x+6} - 3$$

Domain:

Range:

$$\begin{array}{ccc} & & h & , \, k \\ \\ a = & & \left(& , & \right) \end{array}$$





$$y = -2\sqrt{x-1} + 6$$

Domain:

Range:

$$\begin{array}{c} h \, , k \\ a = & \left(\begin{array}{c} , \end{array} \right) \end{array}$$

8)

a)
$$y = \sqrt{x}$$

$$b) \quad y = -\sqrt{x}$$

$$c) \quad y = x^2$$

Graph all 3 on the same graph

What do you notice about the graphs of a&b compared to the graph of c?
What do you notice about their table of values

