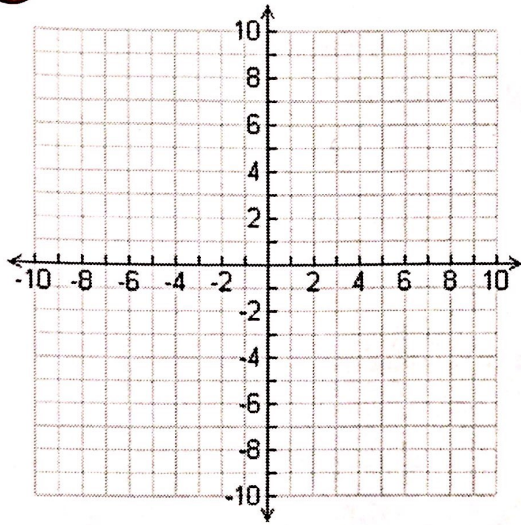_Day 6_ , Day Of Assignment: Parent Function Investigation for _Square root_ functions.

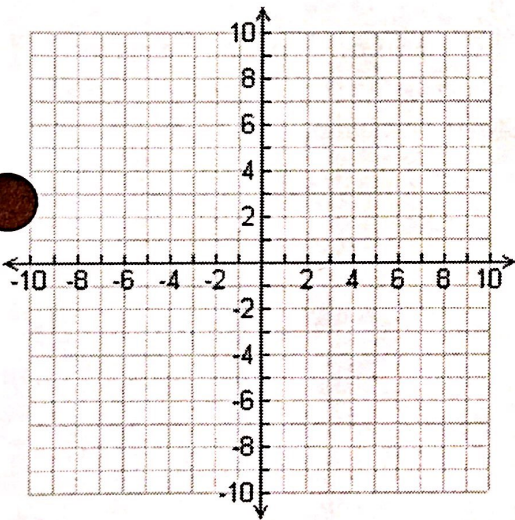Parent Function: $f(x) = \sqrt{x}$

$f(x) = \sqrt{x}$

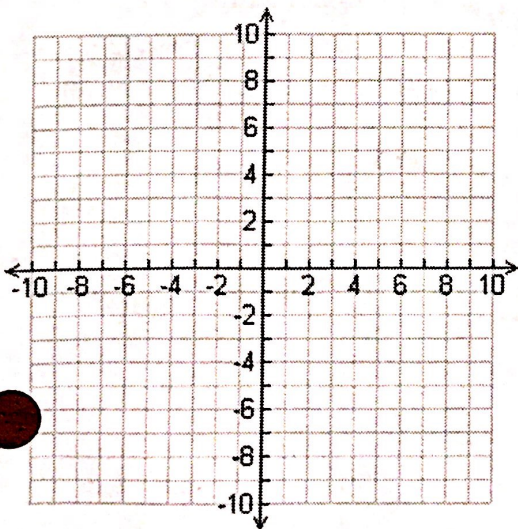| x	f(x)

Describe the graph:

$f(x) = -\sqrt{x}$

x	f(x)

Describe the graph. How is it different than the parent function? Where do you see the difference in the equation? Table? Graph?

$f(x) = \sqrt{x} + 4$

x	f(x)

Describe the graph. How is it different than the parent function? Where do you see the difference in the equation? Table? Graph?

Day 6 , Day Of Assignment: Parent Function Investigation for **Square root** functions.

$$f(x) = \sqrt{X+3}$$

x	f(x)

Describe the graph. How is it different than the parent function? Where do you see the difference in the equation? Table? Graph?
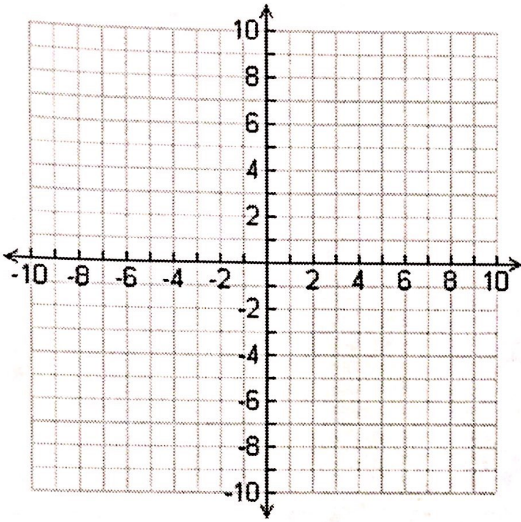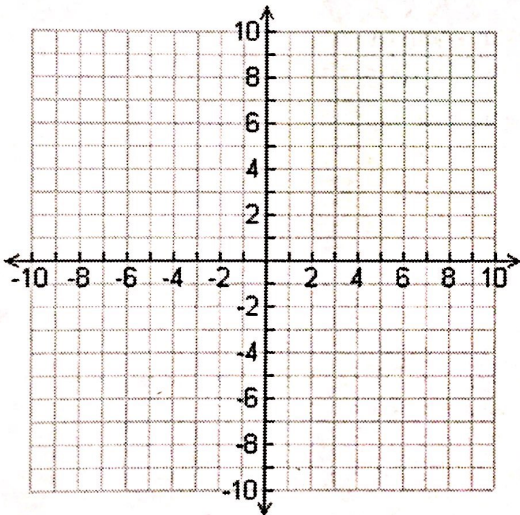
$$f(x) = -\sqrt{X} - 3$$

x	f(x)

Describe the graph. How is it different than the parent function? Where do you see the difference in the equation? Table? Graph?

After comparing some of the transformations from the given parent function, what do you notice? Are there any patterns that you see? Can you tell how a graph will look based on its equation and the function family it is a part of? Write an equation of a graph that would be in this function family and describe what the graph would look like based on your observations and analysis above.