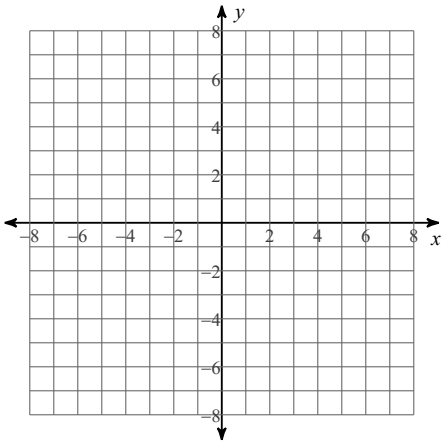
Algebra 1 Honor's Name_____ ID: 1

10-1 Square Root Functions

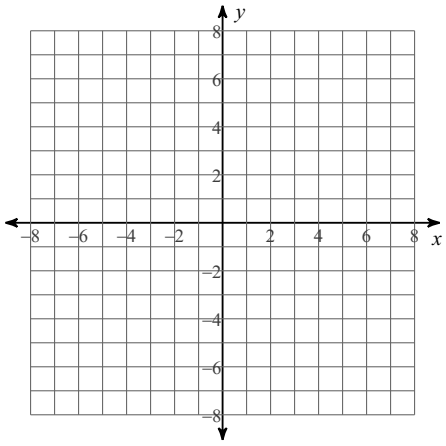
Date_____ Period____

Sketch the graph of each function. Compare to the parent function. State the domain and range.

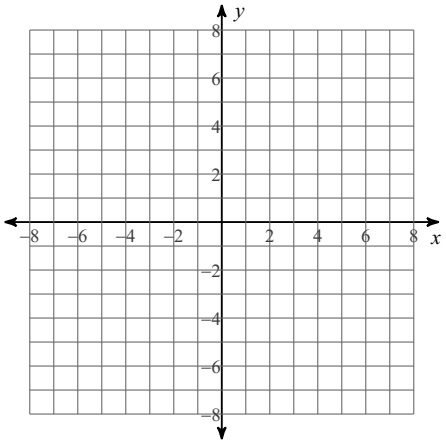
1) $y = \sqrt{x}$



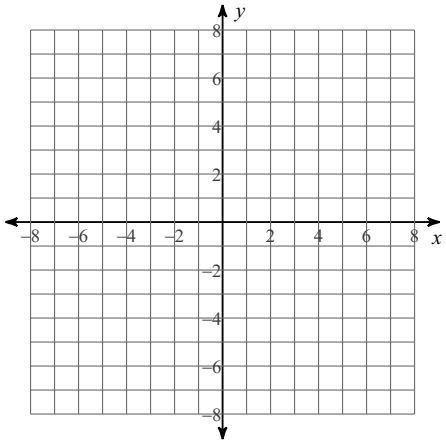
2) $y = \sqrt{x} + 3$



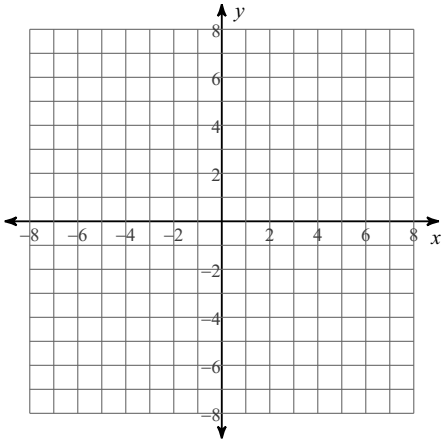
3) $y = -4 + \sqrt{x}$



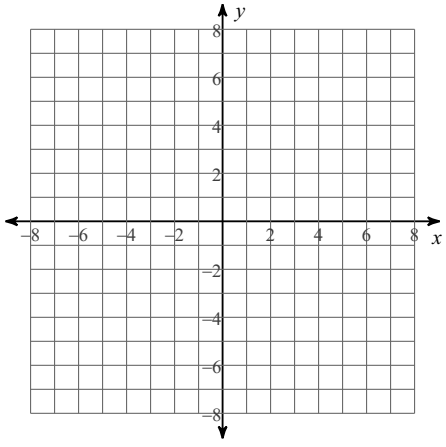
4) $y = \sqrt{x + 3}$



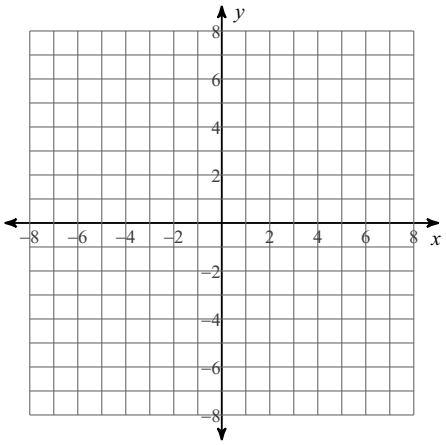
5) $y = \sqrt{x - 4}$



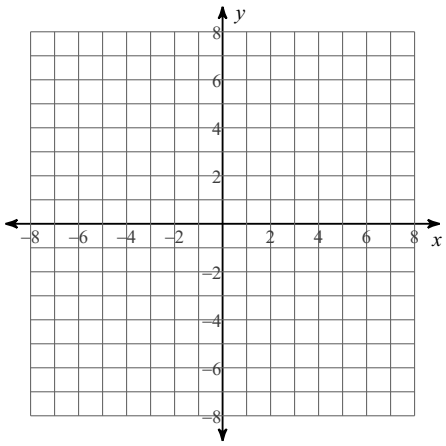
6) $y = \sqrt{x - 4} + 2$



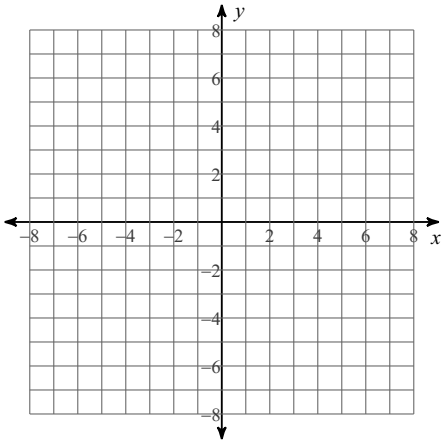
7) $y = \sqrt{x+5} - 5$



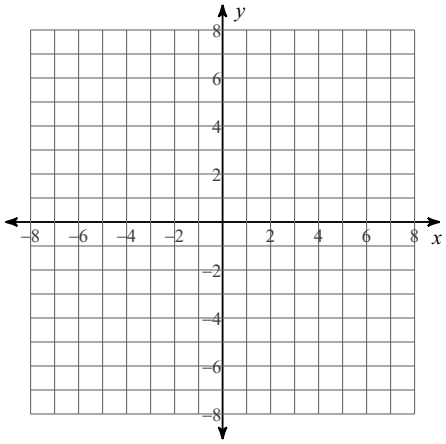
8) $y = \frac{4}{5}\sqrt{x+1} + 4$



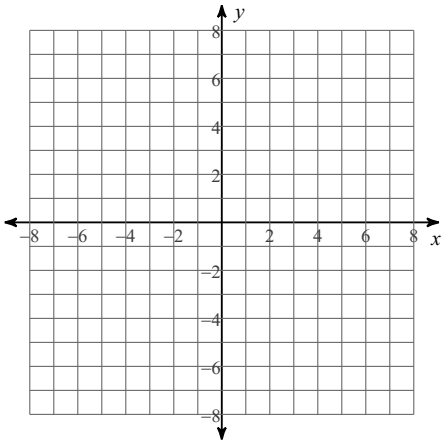
9) $y = \frac{2}{3}\sqrt{x-3} - 2$



10) $y = -\frac{3}{5}\sqrt{x+3} + 5$



11) $y = -4\sqrt{x-4} + 5$



12) The perimeter of a square is given by the funciton $P = 4\sqrt{A}$, where A is the area of the square.

a) Use your graphing calculator to graph the function. Sketch the graph in the space below.

b) Determine the perimeter of a square with an area of 225 m^2.

c) When will the perimeter and area be the same value?