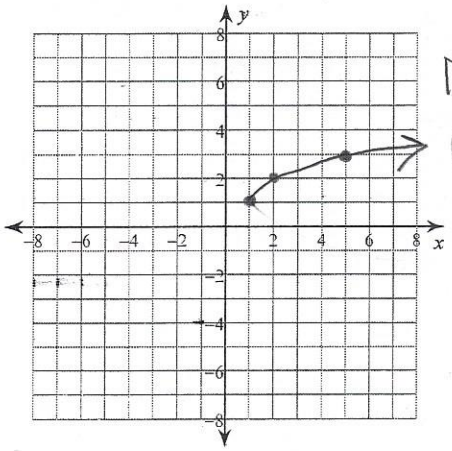
Algebra 2 Name Key

Graphing Square Root Functions day 1

Date _____ Hour ____

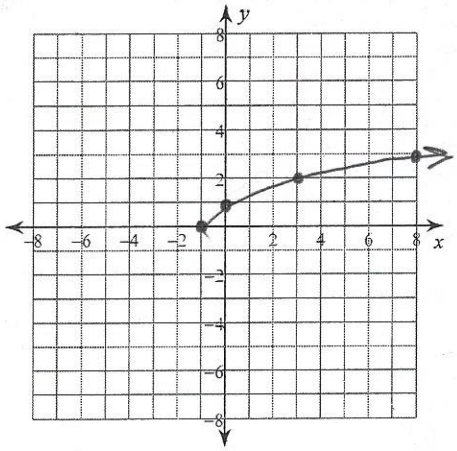
Identify the domain and range of each. Then sketch the graph.

1) $y = \sqrt{x-1} + 1$



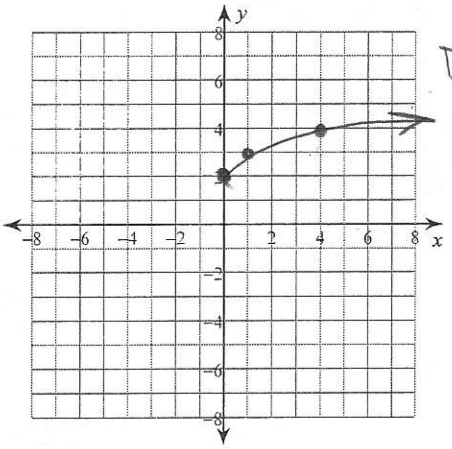
D: $[1, \infty)$
R: $[1, \infty)$

2) $y = \sqrt{x+1}$



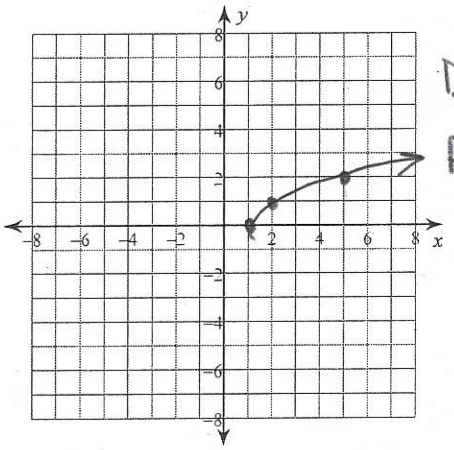
D: $[-1, \infty)$
R: $[0, \infty)$

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



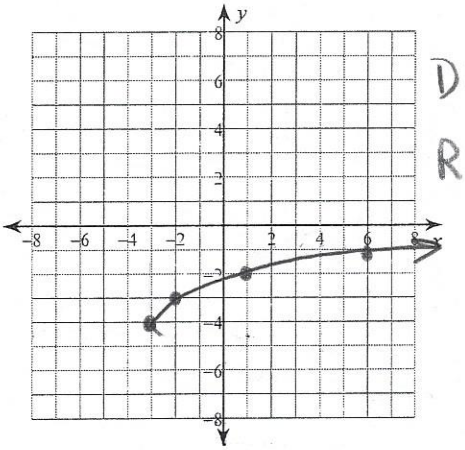
D: $[0, \infty)$
R: $[2, \infty)$

4) $y = \sqrt{x-1}$



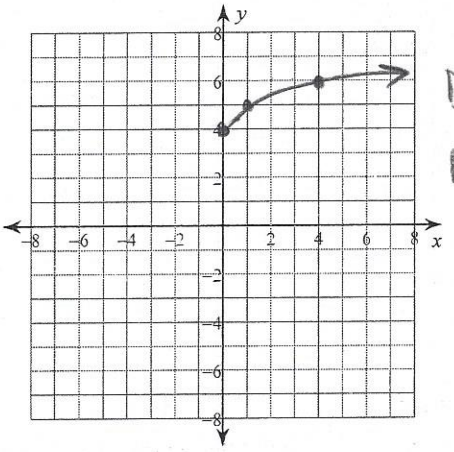
D: $[1, \infty)$
R: $[0, \infty)$

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



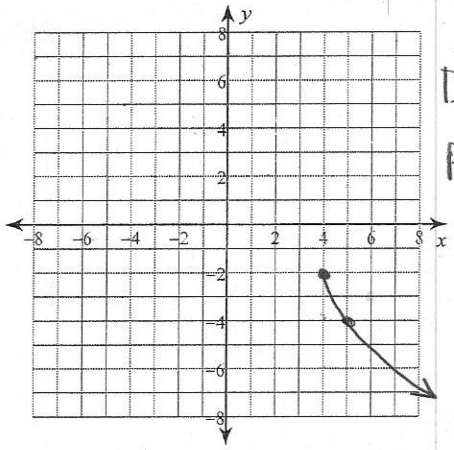
D: $[-3, \infty)$
R: $[-4, \infty)$

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



D: $[0, \infty)$
R: $[4, \infty)$

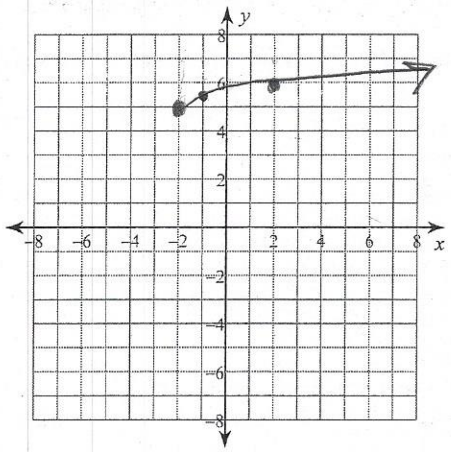
7) $y = -2\sqrt{x-4} - 2$



D: $[4, \infty)$

R: $(-\infty, -2]$

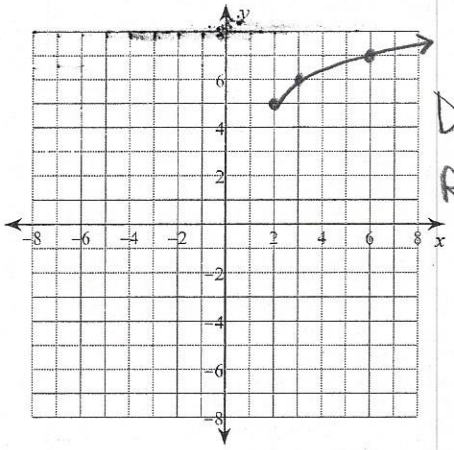
8) $y = \frac{1}{2}\sqrt{x+2} + 5$



D: $[-2, \infty)$

R: $[5, \infty)$

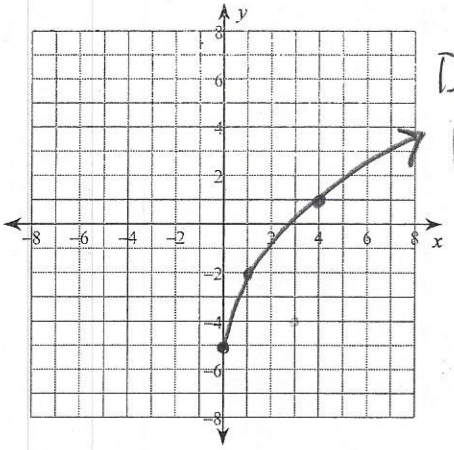
9) $y = \sqrt{x-2} + 5$



D: $[2, \infty)$

R: $[5, \infty)$

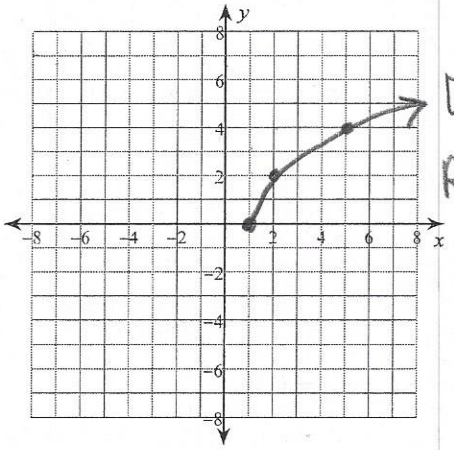
10) $y = 3\sqrt{x} - 5$



D: $[0, \infty)$

R: $[-5, \infty)$

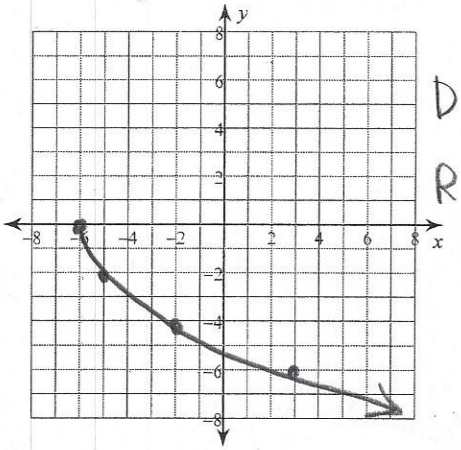
11) $y = 2\sqrt{x-1}$



D: $[1, \infty)$

R: $[0, \infty)$

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



D: $[-6, \infty)$

R: $(-\infty, 0]$

Radical Functions

x	y
1	1
2	4
3	9

Mult this side by a

This side is normal