HW 8-6 Graphing Radicals

Name Selected Answers
Date_____

Identify the domain and range of each.

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

$x - 2 \geq 0$ | R: $[5, \infty)$

$x \geq 2$

D: $[2, \infty)$

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

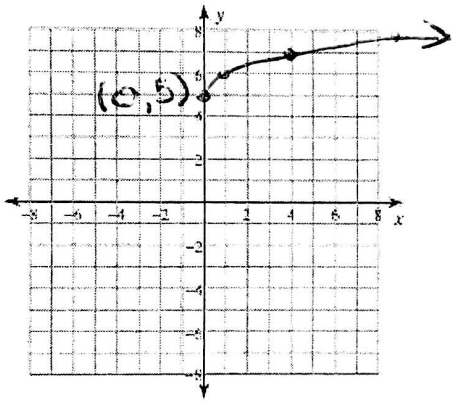
3) $y = \sqrt[3]{x+1} - 4$

4) $y = \sqrt[3]{x-1} - 1$

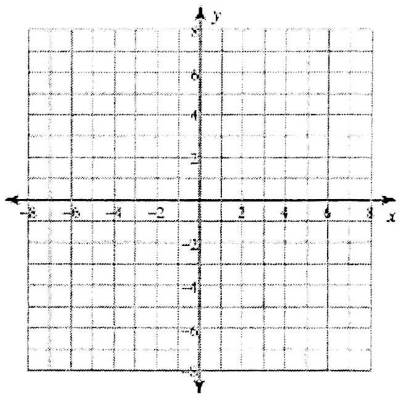
D: $[1, \infty)$ R: $[-1, \infty)$

Sketch the graph of each function.

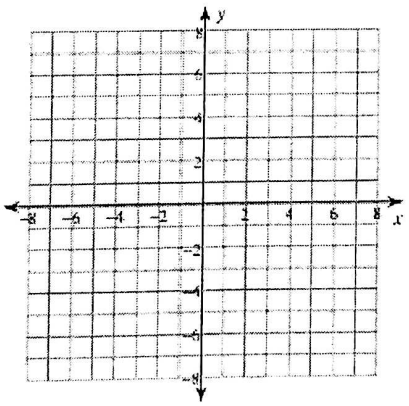
5) $y = \sqrt{x} + 5$



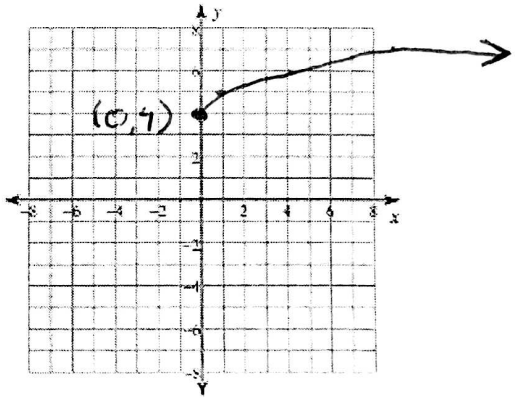
6) $y = \sqrt{x} - 2$



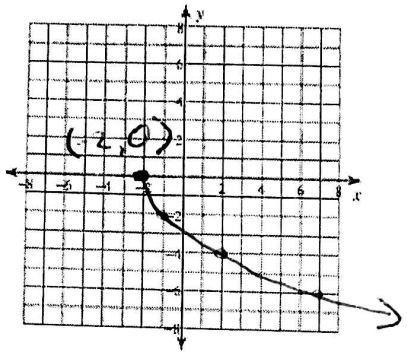
7) $y = 3 + \sqrt{x}$



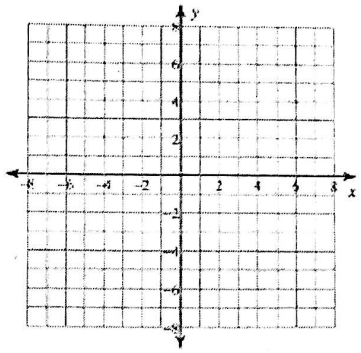
8) $y = \sqrt{x} + 4$



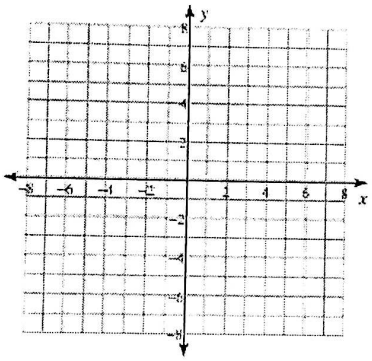
9) $y = -2\sqrt{x+2}$



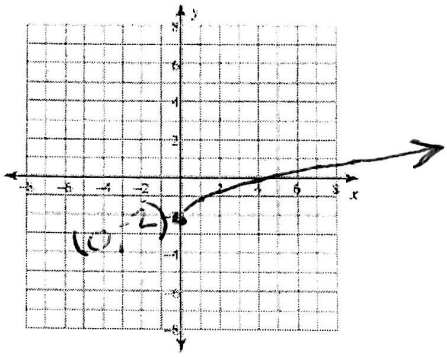
10) $y = \frac{1}{2}\sqrt{x+1} + 4$



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



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

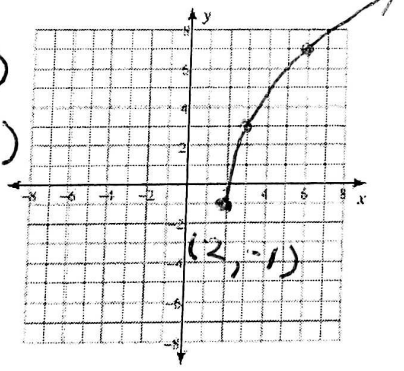


Identify the domain and range of each. Then sketch the graph.

13) $y = 4\sqrt{x-2} - 1$

D: $[2, \infty)$

R: $[-1, \infty)$



14) $y = -\frac{3}{4}\sqrt{x-1} + 4$