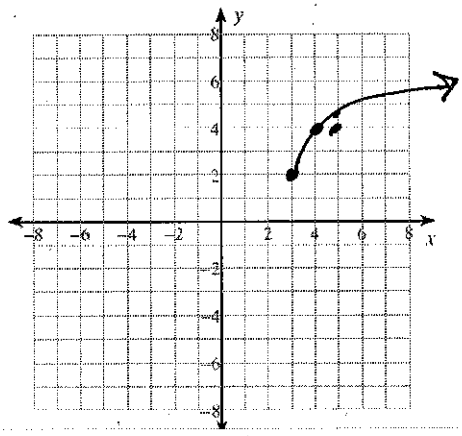
Key

Graphing Radical Functions

Graph the following radical functions equations. List the ***Domain and Range*** in interval notation.

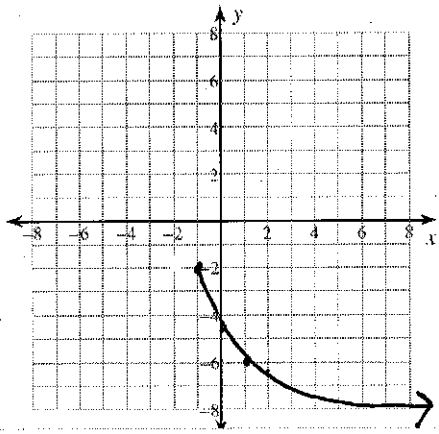
1. $f(x) = 2\sqrt{x-3}+2$



D: $[3, \infty)$

R: $[2, \infty)$

2. $f(x) = -\sqrt{2x+2}-2$



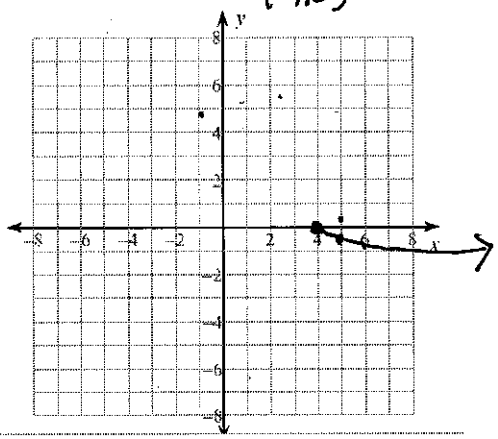
x	y
-2	error
-1	-2
0	-4.8
1	-6
2	-6.9

D: $[-1, \infty)$

R: $[-2, -\infty)$

3. $f(x) = -\frac{1}{3}\sqrt{x-4}$

(4, 0)

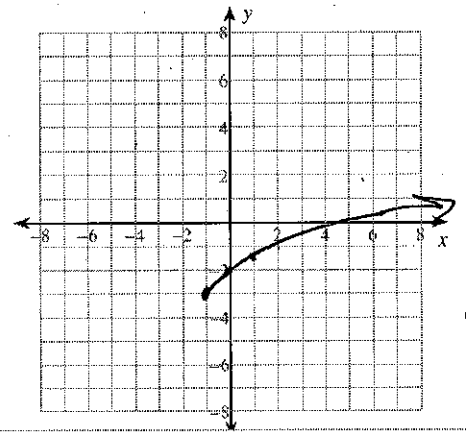


x	y
4	0
5	-.33
6	-.47
7	-.57
8	-.66

D: $[4, \infty)$

R: $[0, -\infty)$

4. $f(x) = \sqrt{x+1}-3$ (-1, -3)

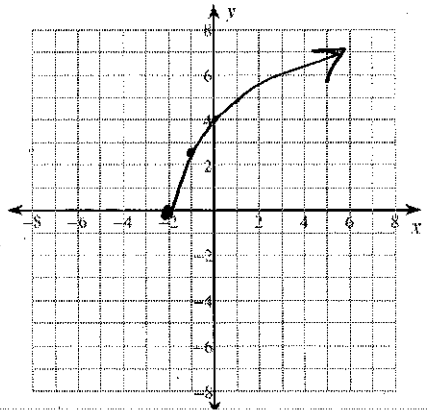


x	y
-1	-3
0	-2
1	-1.6
2	-1.3

D: $[-1, \infty)$

R: $[-3, \infty)$

5. $f(x) = 4\sqrt{\frac{1}{2}x+1}$

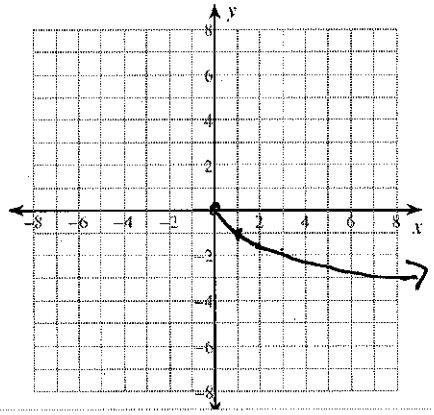


x	y
-2	0
-1	2.8
0	4
1	4.9
2	5.7

D: $[-2, \infty)$

R: $[0, \infty)$

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



x	y
0	0
1	-1
2	-1.4
3	-1.7

D: $[0, \infty)$

R: $[0, -\infty)$