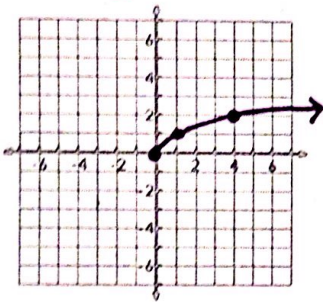


Sketch the graph and fill in the chart for each of the following. Describe the transformation beside the graph.

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

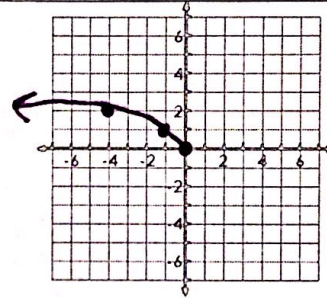
Starting Pt: $(0,0)$	Inc or Dec: Inc.
Domain: $[0, \infty)$	Range: $[0, \infty)$
Abs. Max or <u>Abs Min</u>	$(0,0)$
End Behavior: $x \rightarrow \infty, f(x) \rightarrow \infty$ $x \rightarrow 0^+, f(x) \rightarrow 0$ <u>Right</u> <u>Left</u>	



X	Y
0	0
1	1
4	2

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

Starting Pt: $(0,0)$	Inc or Dec: Dec.
Domain: $(-\infty, 0]$	Range: $[0, \infty)$
Abs. Max or <u>Abs Min</u>	$(0,0)$
End Behavior: $x \rightarrow 0, f(x) \rightarrow 0$ $x \rightarrow -\infty, f(x) \rightarrow \infty$ <u>R</u> <u>L</u>	



X	Y
0	0
-1	1
-4	2

3. $f(x) = \sqrt[3]{x}$

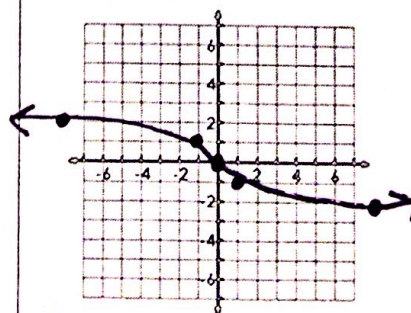
Starting Pt: $(0,0)$	Inc or Dec: Inc.
Domain: $(-\infty, \infty)$	Range: $(-\infty, \infty)$
Abs. Max or Abs Min:	None
End Behavior: $x \rightarrow \infty, f(x) \rightarrow \infty$ $x \rightarrow -\infty, f(x) \rightarrow -\infty$ <u>R</u> <u>L</u>	



X	Y
-8	-2
-1	-1
0	0
1	1
8	2

4. $f(x) = -\sqrt[3]{x}$

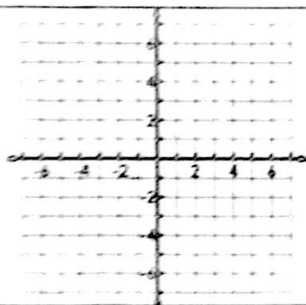
Starting Pt: $(0,0)$	Inc or Dec: Dec.
Domain: $(-\infty, \infty)$	Range: $(-\infty, \infty)$
Abs. Max or Abs Min:	None
End Behavior: $x \rightarrow \infty, f(x) \rightarrow -\infty$ $x \rightarrow -\infty, f(x) \rightarrow \infty$ <u>R</u> <u>L</u>	



X	Y
-8	2
-1	1
0	0
1	-1
8	-2

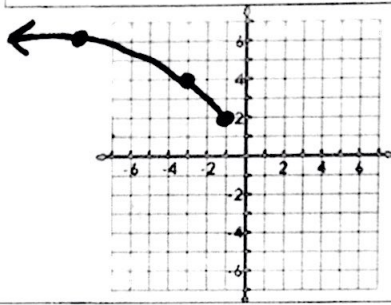
5. $f(x) = -4\sqrt{x+2} - 3$

Starting Pt:	Inc or Dec:
Domain:	Range:
Abs. Max or Abs Min:	
End Behavior: $x \rightarrow \underline{\quad}, f(x) \rightarrow \underline{\quad}$ $x \rightarrow \underline{\quad}, f(x) \rightarrow \underline{\quad}$	



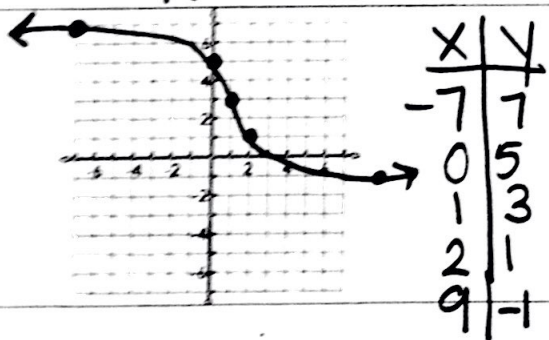
6. $f(x) = \sqrt{-2(x+1)} + 2$

Starting Pt: $(-1, 2)$	Inc or Dec: Dec
Domain: $(-\infty, -1]$	Range: $[2, \infty)$
Abs. Max or Abs Min: $(-1, 2)$	
End Behavior: $x \rightarrow \underline{-1}, f(x) \rightarrow \underline{2}$ $x \rightarrow \underline{-\infty}, f(x) \rightarrow \underline{\infty}$	



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

Starting Pt: $(1, 3)$	Inc or Dec: Dec
Domain: $(-\infty, \infty)$	Range: $(-\infty, \infty)$
Abs. Max or Abs Min: None	
End Behavior: $x \rightarrow \underline{\infty}, f(x) \rightarrow \underline{-\infty}$ $x \rightarrow \underline{-\infty}, f(x) \rightarrow \underline{\infty}$	



8. $f(x) = \sqrt[3]{-3(x+2)} - 4$

Starting Pt:	Inc or Dec:
Domain:	Range:
Abs. Max or Abs Min:	
End Behavior: $x \rightarrow \underline{\quad}, f(x) \rightarrow \underline{\quad}$ $x \rightarrow \underline{\quad}, f(x) \rightarrow \underline{\quad}$	

