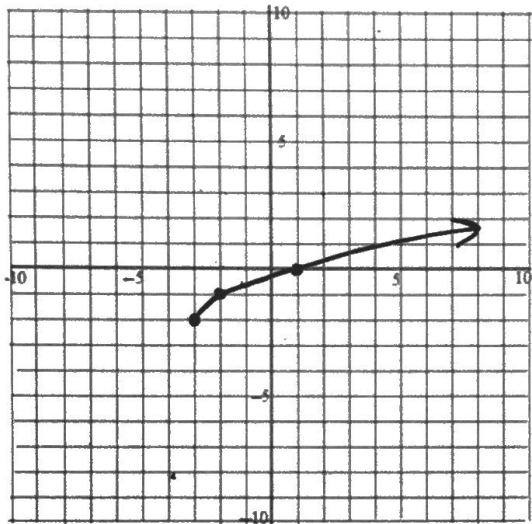


Graph the following equations. Then state the domain and range.

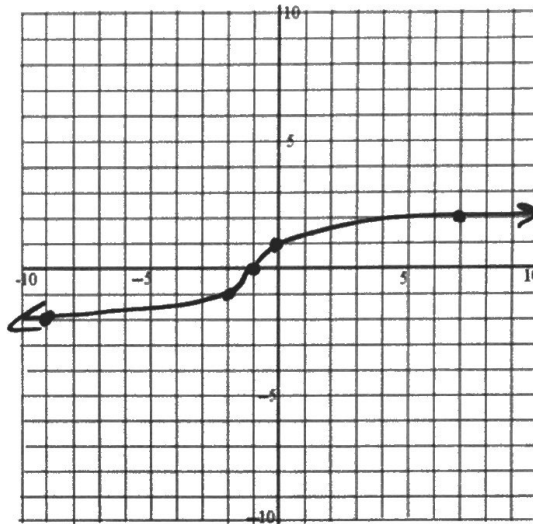
1. $f(x) = \sqrt{x+3} - 2$



Domain: $[-3, +\infty)$

Range: $[-2, +\infty)$

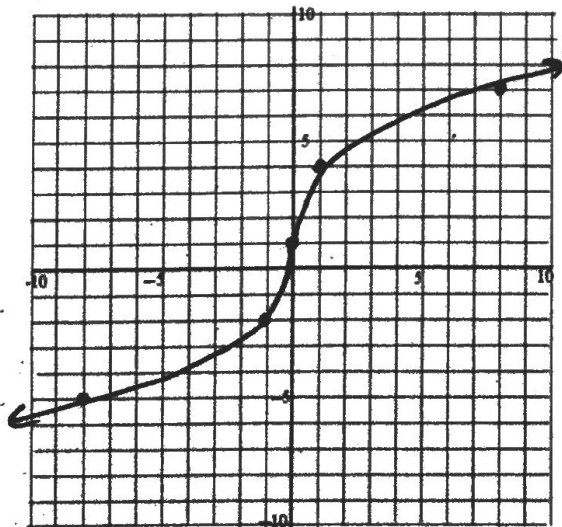
2. $g(x) = \sqrt[3]{x+1}$



Domain: $(-\infty, +\infty)$

Range: $(-\infty, +\infty)$

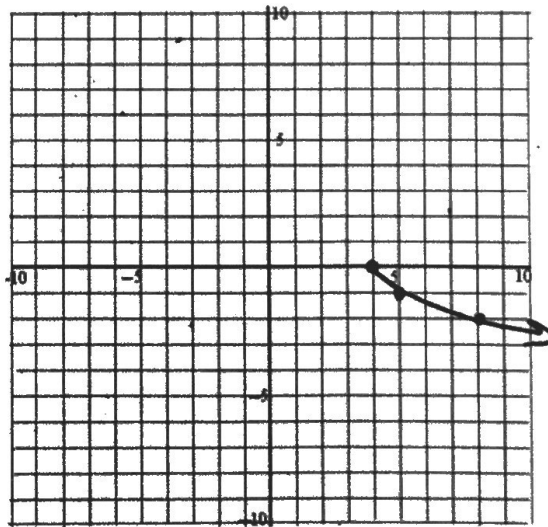
3. $h(x) = 3\sqrt[3]{x} + 1$



Domain: $(-\infty, +\infty)$

Range: $(-\infty, +\infty)$

4. $y = -\sqrt{x-4}$

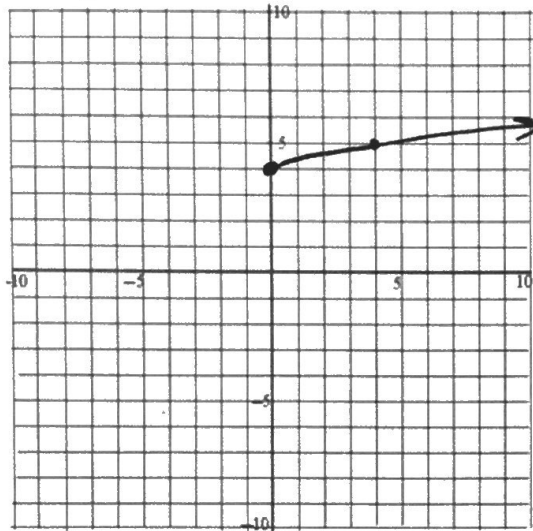


Domain: $[4, +\infty)$

Range: $(-\infty, 0]$

Graph the following equations. Then list the transformations.

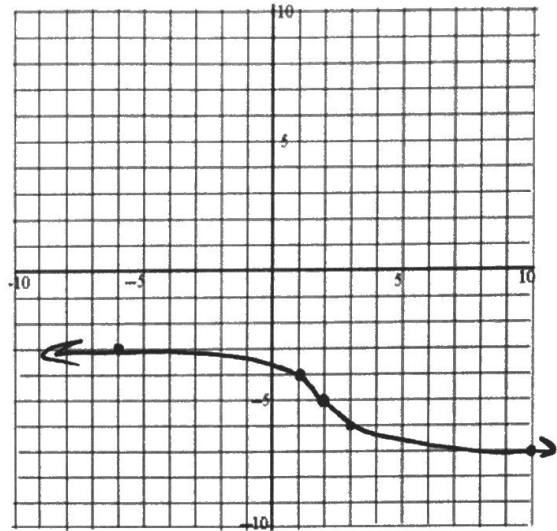
5. $f(x) = \frac{1}{2}\sqrt{x} + 4$



Describe the transformation(s):

vertical compression of $\frac{1}{2}$
up 4

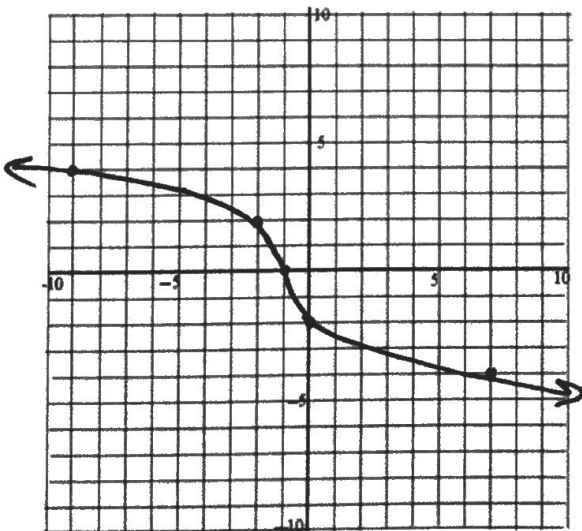
6. $g(x) = -\sqrt[3]{x-2} - 5$



Describe the transformation(s):

right 2
down 5
reflection in x-axis

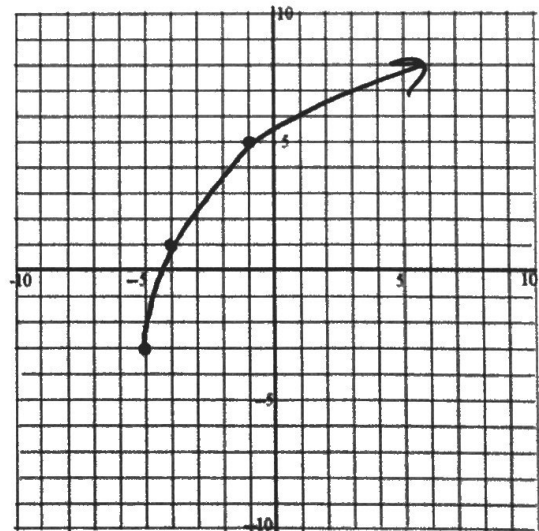
7. $h(x) = -2\sqrt[3]{x+1}$



Describe the transformation(s):

reflection in x-axis
vertical stretch of 2
left 1

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



Describe the transformation(s):

vertical stretch of 4
left 5
down 3