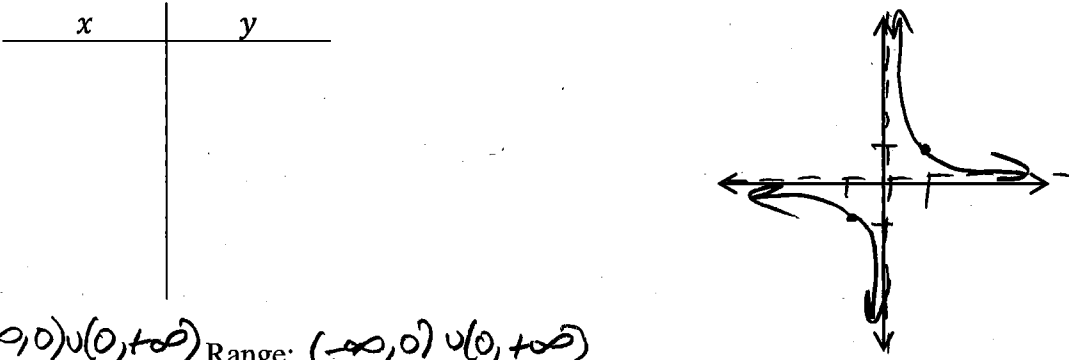


Graph the following parent function as well as identify its domain and range.

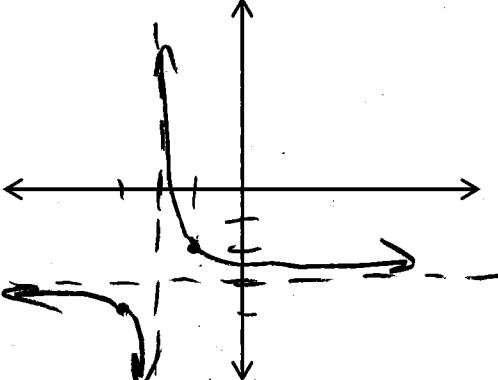
1. $y = \frac{1}{x}$



Domain: $(-\infty, 0) \cup (0, +\infty)$ Range: $(-\infty, 0) \cup (0, +\infty)$

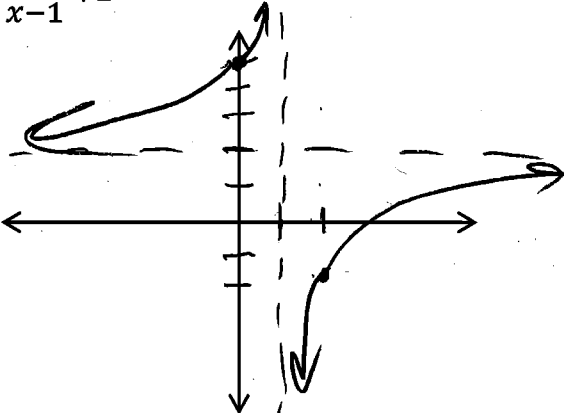
Graph the following. Then state the domain and range.

2. $y = \frac{1}{x+2} - 3$



Domain: $(-\infty, -2) \cup (-2, +\infty)$
Range: $(-\infty, -3) \cup (-3, +\infty)$

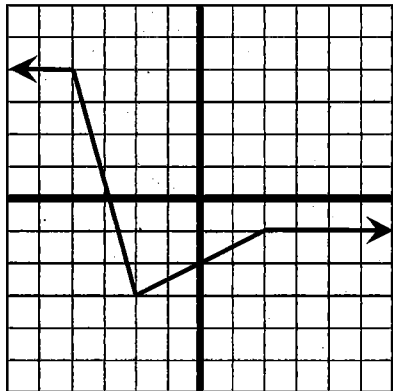
3. $y = \frac{-3}{x-1} + 2$



Domain: $(-\infty, 1) \cup (1, +\infty)$
Range: $(-\infty, 2) \cup (2, +\infty)$

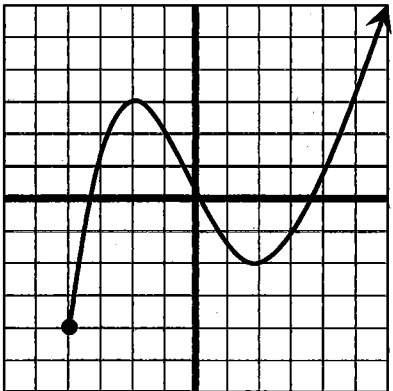
State the domain and range of the following functions.

4.



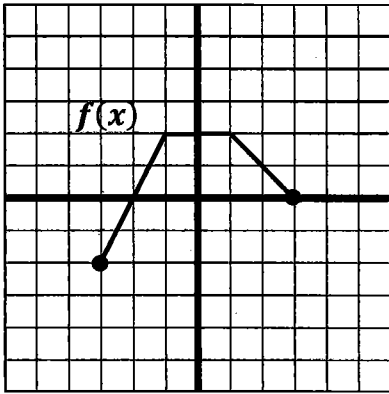
Domain: $(-\infty, +\infty)$
Range: $[-3, 4]$

5.

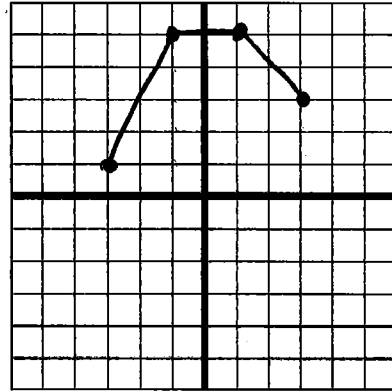


Domain: $[-4, +\infty)$
Range: $[-4, +\infty)$

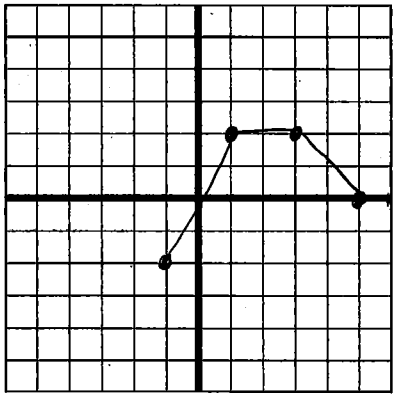
Use the graph of the function $f(x)$ below to graph the other functions



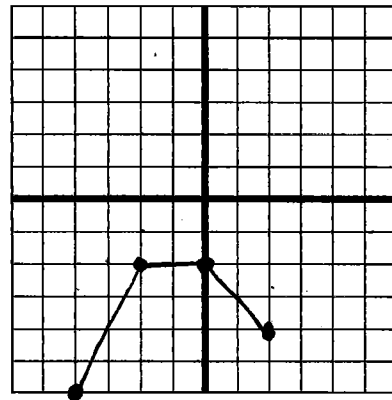
6. $g(x) = f(x) + 3$



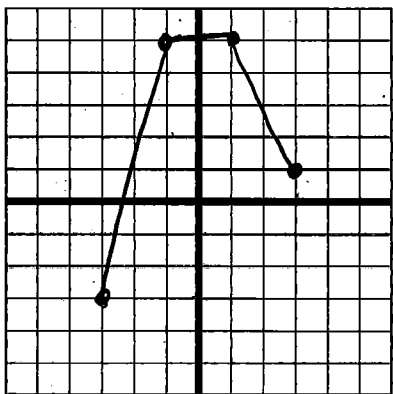
7. $h(x) = f(x - 2)$



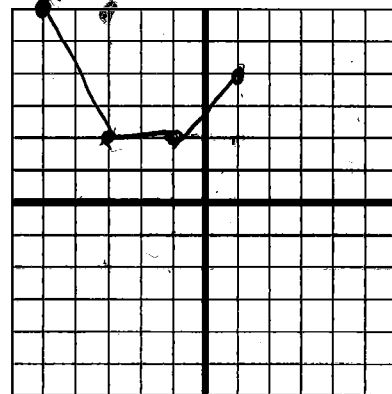
8. $k(x) = f(x + 1) - 4$



9. $m(x) = 2f(x) + 1$



10. $n(x) = -f(x + 2) + 4$



State the domain and range of the following functions from above.

11. Domain of $f(x)$: $[-3, 3]$

12. Domain of $n(x)$: $[-5, 1]$

Range of $f(x)$: $[-2, 2]$

Range of $n(x)$: $[2, 6]$