

Domain:

Range:

1. Determine the domain and range of each function:

a. $y = x + 4$

c. $y = \sqrt{x}$

b. $y = \sqrt{2x - 1}$

d. $y = \frac{5}{x-1}$

Function Notation

$y = 3x + 5$ can be written to $f(x) = 3x + 5$

2. Let $f(x) = -x^2 + 5x - 3$ and $g(x) = 2x + 4$. Find each of the following:

a. $f(2)$

b. $f(q)$

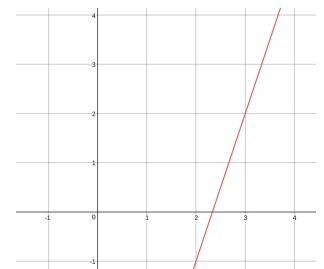
c. $g(a + 1)$

3. For each function, find $f(3)$

a. $f(x) = 3x - 7$

b. $f = \{(-3, 5), (0, 3), (3, 1), (6, -1)\}$

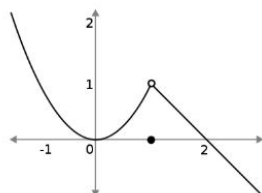
c.



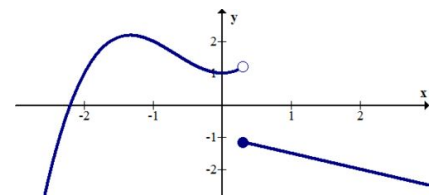
Continuity:

4. Describe the intervals of continuity for each function

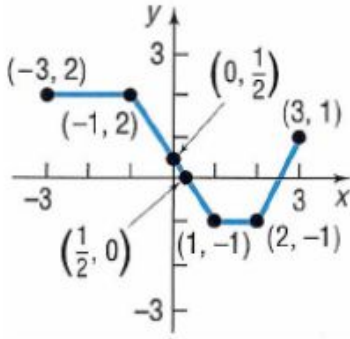
a.



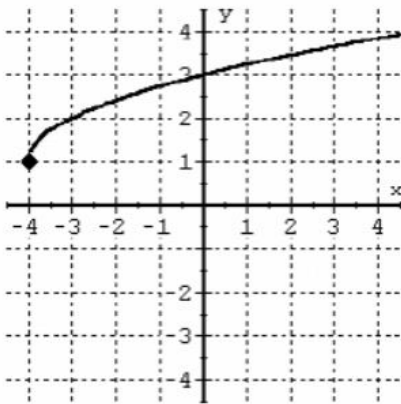
b.



7. Determine where the function is increasing, decreasing, and constant.



8.



Domain: _____

Range: _____

Relative Min: _____

Relative Max: _____

Intervals – Increasing: _____

Decreasing: _____

Constant: _____

Zeros: _____