Section 2.2

An Introduction to Functions

1. Determine whether each relation represents a function. State the domain and the range of each relation.
(Similar to p.160 #19-27)

$$\{(1,2),(3,4),(2,5)\}$$

2. Determine whether each relation represents a function. State the domain and the range of each relation.
(Similar to p.160 #19-27)

$$\{(-4,1),(-4,-2),(3,1)\}$$

3. Determine whether each relation represents a function. State the domain and the range of each relation.
(Similar to p.160 #19-27)

$$\{(8,3),(5,3),(3,3)\}$$

4. Determine whether each equation shows y as a function of x
(Similar to p.161 #29-37)

$$y = 2x + 1$$

5. Determine whether each equation shows y as a function of x
(Similar to p.161 #29-37)

$$5x + 2y = 7$$

6. Determine whether each equation shows y as a function of x
(Similar to p.161 #29-37)

$$y = \pm 3x$$

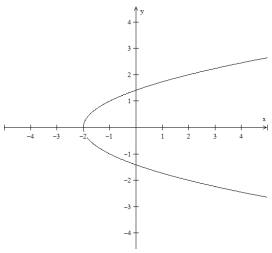
7. Determine whether each equation shows y as a function of x
(Similar to p.161 #29-37)

$$y = x^5 - 1$$

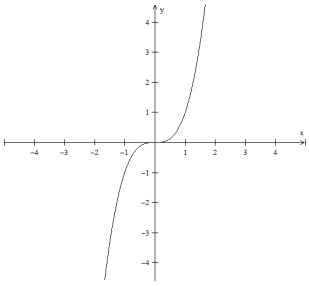
8. Determine whether each equation shows y as a function of x
(Similar to p.161 #29-37)

$$y^2 = x + 1$$

9. Determine whether the graph is that of a function.
(Similar to p.161 #39-45)



10. Determine whether the graph is that of a function.
(Similar to p.161 #39-45)



11. Find the following values for each function.
(Similar to p.161 #47-49)

$f(x) = 4x - 1$

$f(0)$ $f(3)$ $f(-2)$ $f(-x)$

$-f(x)$ $f(x+2)$ $f(2x)$ $f(x+h)$

12. Find the value of each function
(Similar to p.161 #51-57)

$$f(x) = -3x^2 - 5x + 2, f(-2)$$

13. Find the value of each function
(Similar to p.161 #51-57)

$$h(q) = \frac{4q^2}{q-3}, h(-5)$$