

Name: _____ Date: _____

Characteristics of Functions

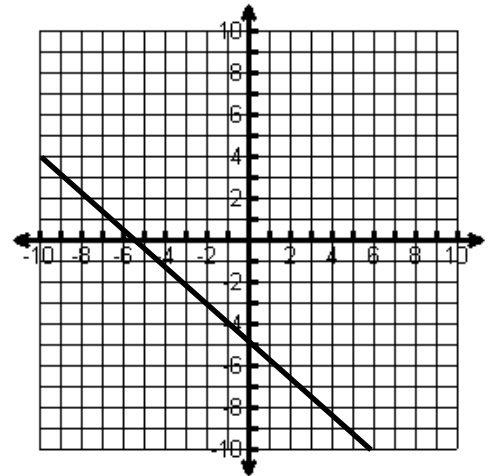
1.

- a. Domain: _____ b. Range: _____
 c. Increasing: _____ d. Decreasing: _____
 e. y – int: _____ f. x – int: _____

$$x \rightarrow \text{_____} \quad f(x) \rightarrow \text{_____}$$

g. End Behavior:

$$x \rightarrow \text{_____} \quad f(x) \rightarrow \text{_____}$$



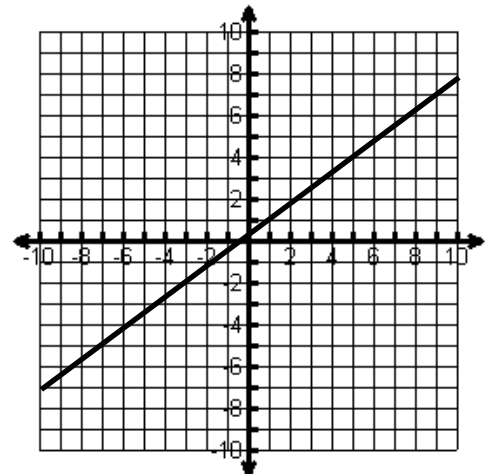
2.

- a. Range: _____ b. Roots : _____
 c. Increasing: _____ d. y - int: _____
 e. Rate of Change $[-2, 1]$: _____

$$x \rightarrow \text{_____} \quad f(x) \rightarrow \text{_____}$$

f. End Behavior:

$$x \rightarrow \text{_____} \quad f(x) \rightarrow \text{_____}$$

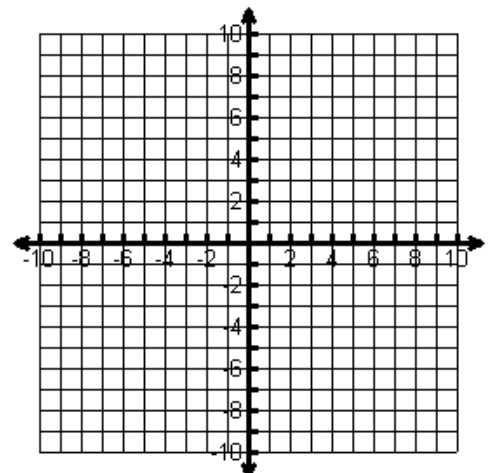
3. $f(x) = 3x - 12$

- a. Domain: _____ b. y - int: _____
 c. Solutions: _____ d. Decreasing: _____
 e. Is this a function? Why or why not?

$$x \rightarrow \text{_____} \quad f(x) \rightarrow \text{_____}$$

f. End Behavior:

$$x \rightarrow \text{_____} \quad f(x) \rightarrow \text{_____}$$



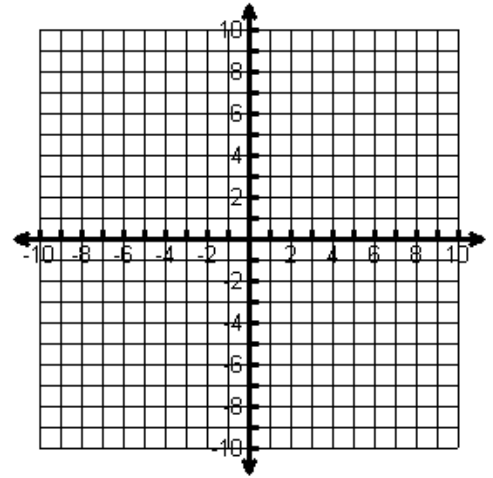
4. $8x + 2y = 6$

a. Increasing: _____ b. Decreasing: _____

c. y - int: _____ d. zeros: _____

e. Rate of Change $[-4, 6]$: _____ $x \rightarrow$ _____ $f(x) \rightarrow$ _____

f. End Behavior:

 $x \rightarrow$ _____ $f(x) \rightarrow$ _____

5. $f(x) = 6$

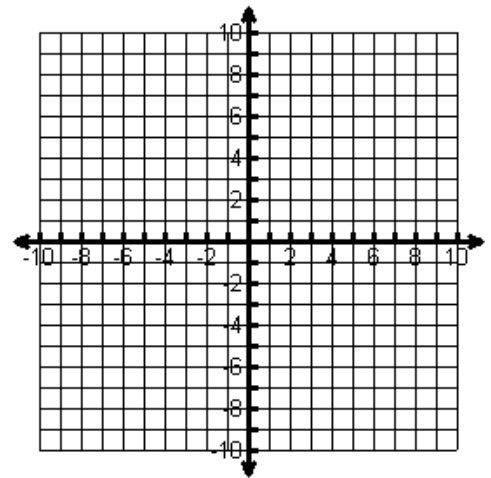
a. Domain: _____ b. Increasing: _____

c. x - int: _____ d. Range: _____

e. Is this a function? Why or why not?

 $x \rightarrow$ _____ $f(x) \rightarrow$ _____

f. End Behavior:

 $x \rightarrow$ _____ $f(x) \rightarrow$ _____**Review:** Given $f(x) = -x^2 + 4x - 1$ $g(x) = 2x^2 - 5x$ $h(x) = -2x + 7$

6. $f(-2) =$ _____

7. $f(g(1)) =$ _____

8. $h(2) + f(3) =$ _____

9. $h(x+1) =$ _____

10. $3g(2) + 1 =$ _____

11. $h(\text{---}) = 15$