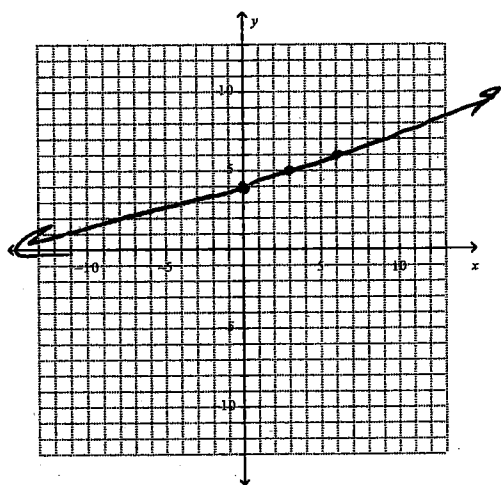
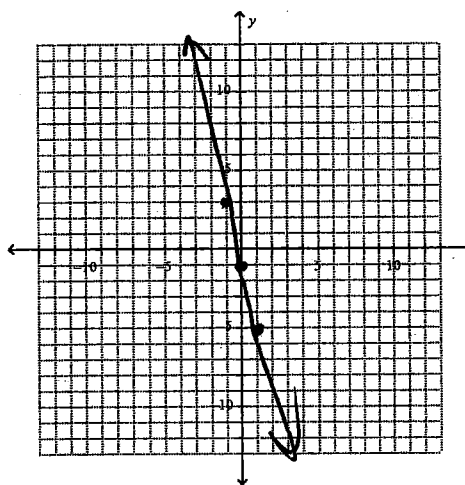


Graph the following equations.

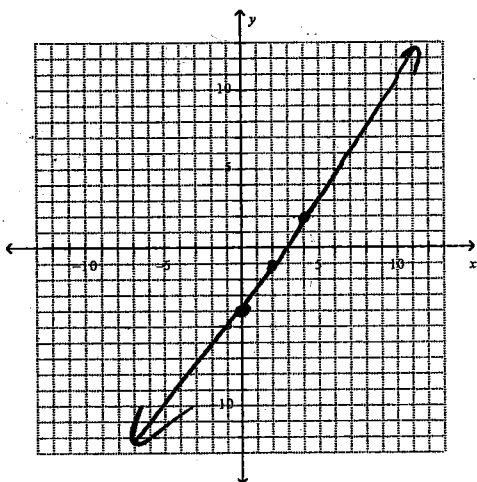
1)  $y = \frac{1}{3}x + 4$



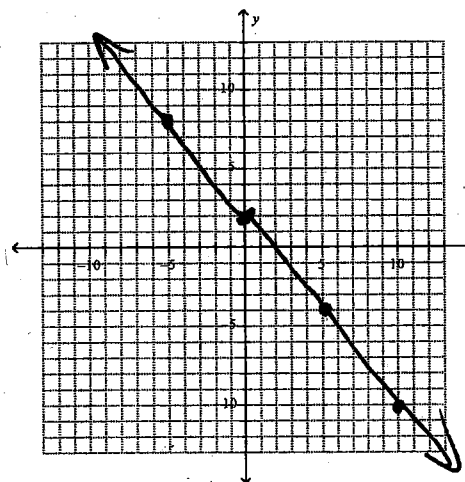
2)  $y = -4x - 1$



3)  $3x - 2y = 8$   $y = \frac{3}{2}x - 4$

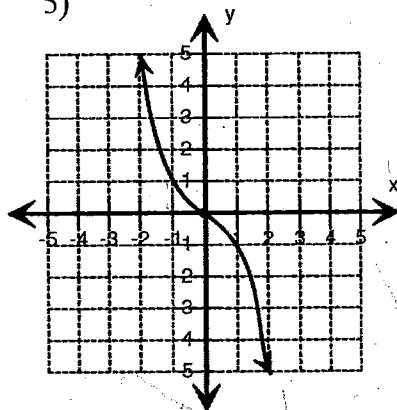


4)  $6x + 5y = 10$   $y = -\frac{6}{5}x + 2$



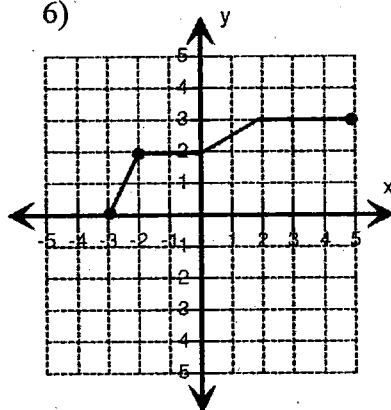
Evaluate the following given the graphs below

5)



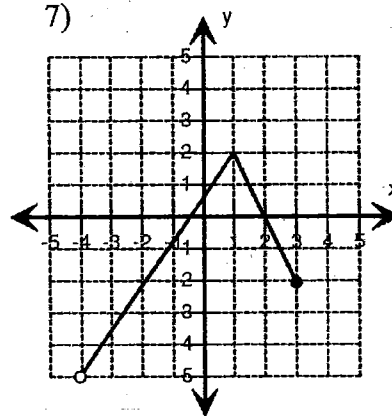
$f(1) = \boxed{-2}$

6)



$f(-2) = \boxed{2}$

7)



$f(3) = \boxed{-2}$

Simplify the following

8)  $x(x-3) + x(x+1)$

$$x^2 - 3x + x^2 + x$$

$$\boxed{2x^2 - 2x}$$

9)  $9x - 3(x^2 + 2x) - 1$

$$9x - 3x^2 - 6x - 1$$

$$\boxed{-3x^2 + 3x - 1}$$

10)  $6x(x+2) - 7x(8x+1)$

$$6x^2 + 12x - 56x^2 - 7x$$

$$\boxed{-50x^2 + 5x}$$

Solve the following for x.

11)  $7x - 10 = 3x + 2$   
 $-3x - 10 \quad -3x + 2$

$$\frac{4x}{4} = \frac{12}{4}$$

$$\boxed{x=3}$$

12)  $12x + 5 = 3x - 4$   
 $-3x + 5 \quad -3x - 4$

$$9x = -9$$

$$\boxed{x=-1}$$

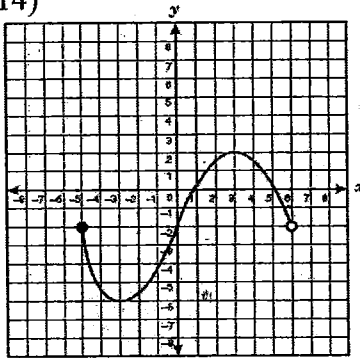
13)  $3(x-1) - 5 = 4x - 8$

$$3x - 3 - 5 = 4x - 8$$

$$\frac{3x - 8}{-3x + 8} = \frac{4x - 8}{-3x + 8}$$

Identify the domain and range of the graphs below.

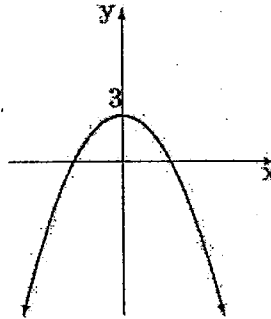
14)



Domain:  $\boxed{[-5, 6]}$

Range:  $\boxed{[-6, 2]}$

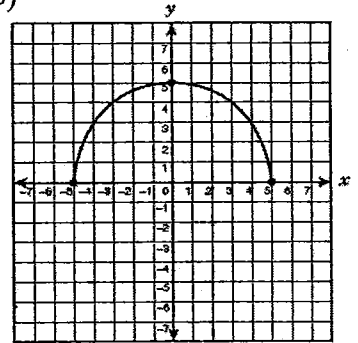
15)



Domain:  $\boxed{(-\infty, +\infty)}$

Range:  $\boxed{(-\infty, 3]}$

16)



Domain:  $\boxed{[-5, 5]}$

Range:  $\boxed{[0, 5]}$

Describe the transformations below.

17)  $y = -f(x+1) - 5$

→ reflection

→ left 1

→ down 5

18)  $y = 2f(x) + 3$

→ stretch of 2

→ up 3

19)  $y = -\frac{1}{2}f(x-8)$

→ reflection

→ compression of  $\frac{1}{2}$

→ right 8

Tell whether the given coordinate is a solution to the given inequality.

20)  $y \leq 6x - 9$ ; (3, 7)

$$7 \leq 6(3) - 9$$

$$7 \leq 9$$

$\boxed{\text{Yes}}$

21)  $y > -|x-2| + 3$ ; (2, 0)

$$0 > -|2-2| + 3$$

$$0 > 3$$

$\boxed{\text{No}}$

22)  $5x - 2y < 3$ ; (1, 1)

$$5 - 2 < 3$$

$$3 < 3$$

$\boxed{\text{No}}$