

6-2

Remember slope-intercept form: $y = mx + b$; m = slope and b = y-intercept.

Identify the slope and y-intercept for each equation. (2 points each)

4) $y = 2x + 3$

$m = 2$ $b = 3$

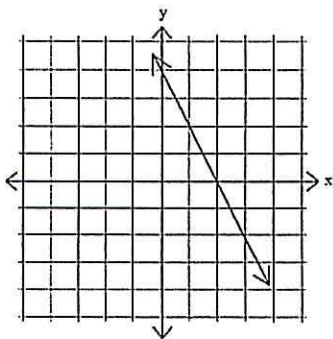
5) $y = 3 - \frac{1}{4}x$

$m = -\frac{1}{4}$ $b = 3$

6) Write the equation of the line with slope 2 and y-intercept -1. (2 points)

$y = 2x - 1$

7) Write the equation for this line. Find the slope (m) and the y-intercept (b). (2 points)



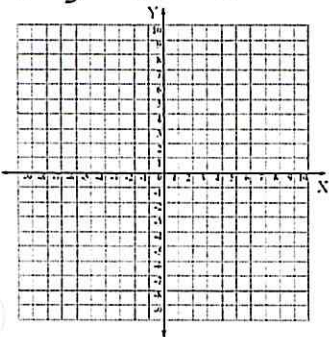
$y = -2x + 4$

8-10

a) Graph each equation and tell what the slope of the line is. (2 points each)

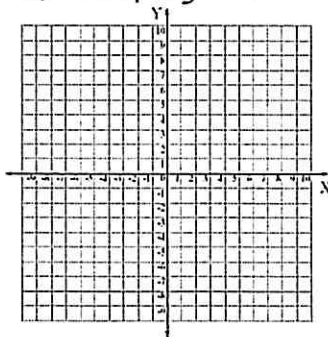
b) Tell whether (4, -2) is a solution for each equation. (1 point each)

8) $y = -3x - 4$



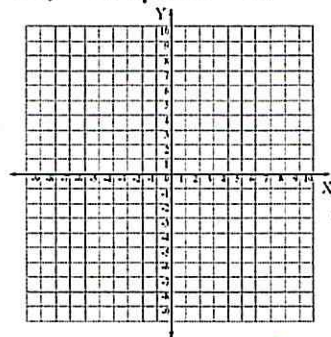
$m = 3$
NO

9) Graph $y = -2$

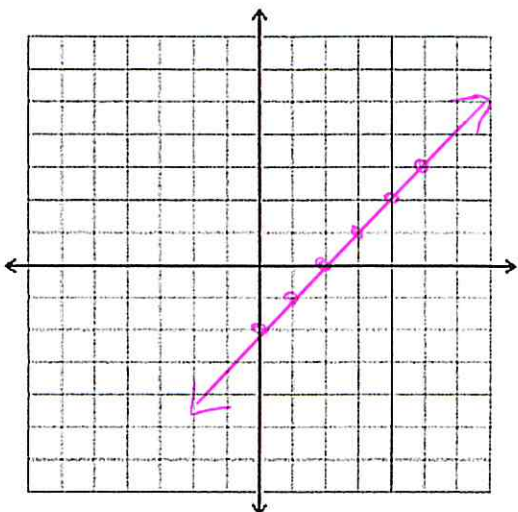


$m = 0$
yes

10) Graph $x = 4$



$m = \text{undefined}$
yes



Slope (m) -1

Y-intercept (b): 2

Slope Intercept Form

$$y = mx + b$$

Let's use

$$y = -x + 2$$

Table

x	y
-2	4
-1	3
0	2
1	1
2	0

Independent Variable x

Dependent Variable y

Is the ordered pair (5, 7) a solution? If not, give an ordered pair that is a solution.

NO (5, 7)

IS NOT on the line.

(0, 2)

Does the given line pass through the origin? Explain.

NO the line is

shifted 2 units up.

Is the given line increasing or decreasing?

The line is

increasing.

6-1

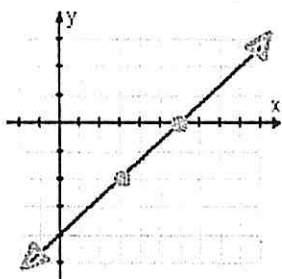
1. a) Find the rate of change in the table. (3 points)
 b) What does the rate of change represent? (2 point)

Number of movies	Amount Paid
3	32.97
5	54.95
8	87.92
12	131.88

a. \$10.99

b. Each movie costs \$10.99

- 2). Find the slope of the line. (Count up and over). (2 points)

 $m = 2/3$

- 3) Find the slope of the line containing each pair of points. (2 points each)

Use the slope formula: $\frac{y_2 - y_1}{x_2 - x_1}$

a) (4, -1) and (-3, 7)

$m = -8/7$

b) (-2, 5) and (-2, -6)

$m =$
Undefined

c) (3, 4) and (5, 8)

$m = 2$