Name _____ Date _____

Mrs. Roumbos 8R Period _____

Coordinate Geometry Extra Review

1) What is the slope of a line whose equation is $2y = 6x + 4$?

2) What is the equation of a line passing through the points (1,5) and (3,11)?

3) Does (1,-10) satisfy $y = -3x - 10$?

4) What are the slope and the coordinates of the y-intercept of $y = 2x - 5$?

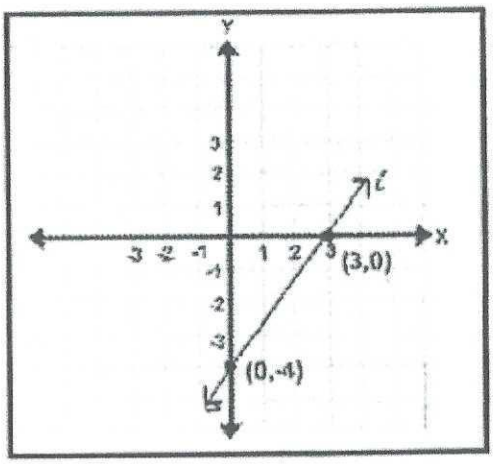
5) What is the slope and the coordinates of the y-intercept of: $4x + 2y = 8$

6) Write an equation of a line for the following table:

X	Y
1	7
2	8
3	9
4	10

7) Find the equation of the line that has a slope of -2 and y-intercept of -9

8) What is the slope of the line shown in the figure below?



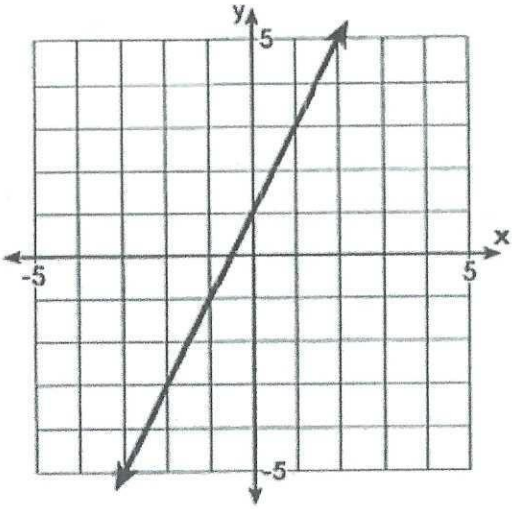
a) $\frac{4}{3}$

b) $\frac{3}{4}$

c) $-\frac{3}{4}$

d) $-\frac{4}{3}$

9) a) What is the equation of this line?



b) What type of slope does this line have?

Name Key

Date _____

Mrs. Roumbos

8R Period _____

Coordinate Geometry Extra Review

1) What is the slope of a line whose equation is $\frac{2y}{2} = \frac{6x}{2} + \frac{4}{2}$?

$y = 3x + 2$

$y = mx + b$

Slope = $m = 3$

2) What is the equation of a line passing through the points (1,5) and (3,11)?

$y = mx + b$

$m = 3$

$b = 2$

$x_1\ y_1 \quad x_2\ y_2$

$y = 3x + 2$

$(1,5)\ (3,11)$

$x_1, y_1, x_2 y_2$

$m = \frac{y_2 - y_1}{x_2 - x_1}$

$m = \frac{11-5}{3-1}$

$m = \frac{6}{2} \quad m = 3$

$(1,5) \quad m = 3$

$x\ y$

$y = mx + b$

$5 = (3)(1) + b$

$5 = 3 + b$

$-3 \quad -3$

$2 = b$

3) Does (1,-10) satisfy y = -3x - 10?

$x\ y \qquad y = -3x - 10$

plug in the #'s

$-10 = -3(1) - 10$

$-10 = -3 - 10$

$-10 \neq -13$

NO the point is not a solution b/c it doesn't satisfy the equation

4) What are the slope and the coordinates of the y-intercept of y = 2x - 5?

b

$y = mx + b$

Slope = $m = 2$

y-int = $(0,-5)$

↑ only give the coordinates when they ask for it!

5) What is the slope and the coordinates of the y-intercept of: 4x + 2y = 8

b

$4x + 2y = 8$

$-4x \qquad -4x$

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

$y = -2x + 4$

Slope = $m = -2$

y-int = $B = (0,4)$

↑ only give the coordinates when they ask for it!

6) Write an equation of a line for the following table:

X	Y
1	7
2	8
3	9
4	10

$(1,7)\ (2,8)$

$y = mx + b$

$m = 1$

$b = 6$

$y = x + 6$ or $y = 1x + 6$

$(1,7)\ (2,8)$

x_1, y_1, x_2, y_2

$m = \frac{y_2 - y_1}{x_2 - x_1}$

$m = \frac{8-7}{2-1}$

$m = \frac{1}{1}$

$m = 1$

$(1,7) \quad m = 1$

$x\ y$

$y = mx + b$

$7 = (1)(1) + b$

$7 = 1 + b$

$-1 \quad -1$

$6 = b$

7) Find the equation of the line that has a slope of -2 and y-intercept of -9

m b

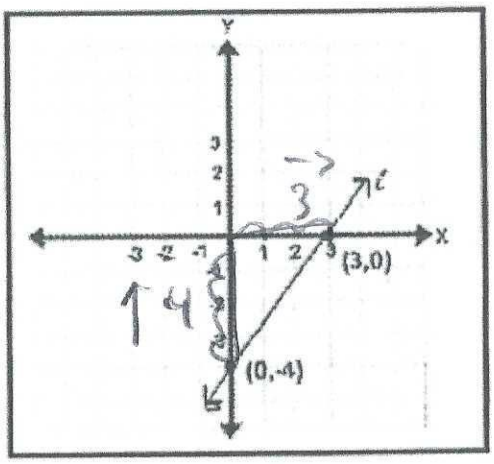
$y = mx + b$

$m = -2$

$b = -9$

$y = -2x - 9$

8) What is the slope of the line shown in the figure below?



a) $\frac{4}{3}$

b) $\frac{3}{4}$

c) $-\frac{3}{4}$

d) $-\frac{4}{3}$

$m = \frac{rise}{run}$

$m = \frac{4}{3}$

9) a) What is the equation of this line?

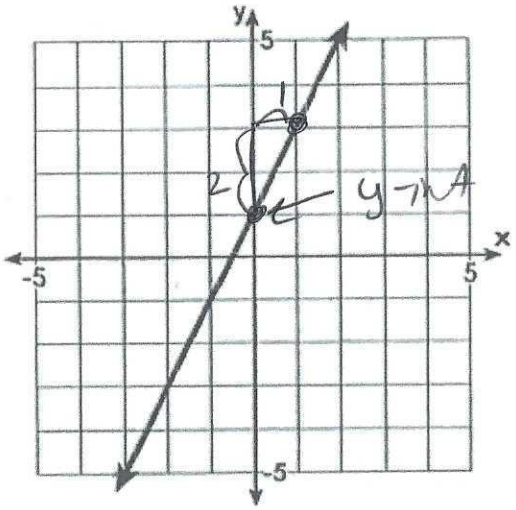
$y = mx + b$

$m = 2$

$b = 1$

$y = 2x + 1$

$m = \frac{rise}{run}$ $m = \frac{2}{1}$ $m = 2$



b) What type of slope does this line have?

positive

(up to the right)