#60

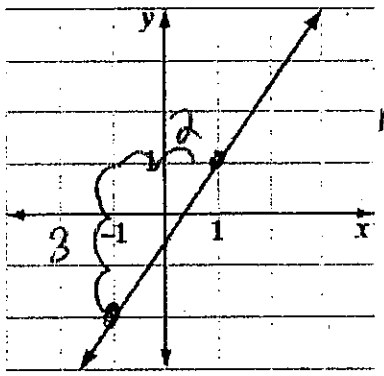
Name Key
8A; Algebra 1

Date _____
Period _____

Homework

In 1–6: a. Tell whether each line has a positive slope, a negative slope, a slope of zero, or no slope.
b. Find the slope of each line that has a slope.

1)



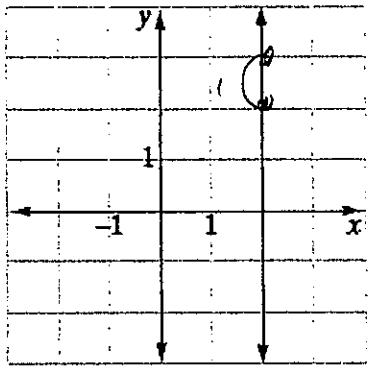
$m = \frac{\text{rise}}{\text{run}}$

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

a) positive

b) $\frac{3}{2}$

2)



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

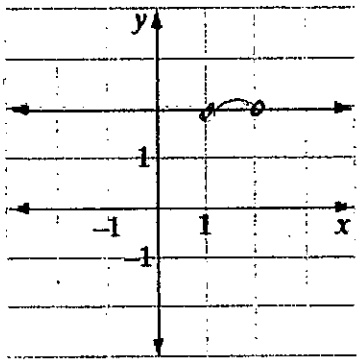
$m = \frac{1}{0}$

m = undefined

a) undefined

b) no slope

3)



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

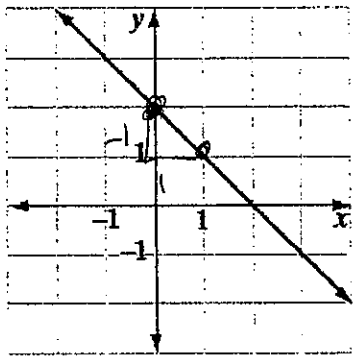
$m = \frac{0}{1}$

$m = 0$

a) zero

b) zero

4)



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

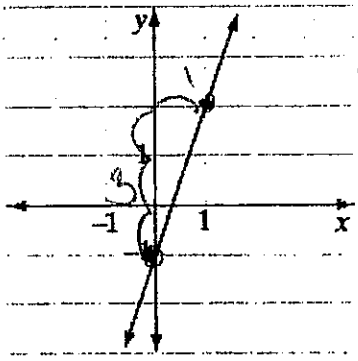
$m = \frac{-1}{1}$

$m = -1$

a) Negative

b) -1

5)



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

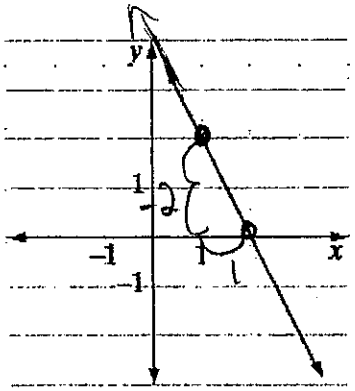
$m = \frac{3}{1}$

$m = 3$

a) positive

b) 3

6)



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

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

$m = -2$

a) Negative

b) -2

For 7 & 8: Find the slope of the line that passes through the given two points

7) (1,5) and (7, -8)

$x_1\ y_1 \quad x_2\ y_2$

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

$$m = \frac{-8-5}{7-1}$$

$$\boxed{m = \frac{-13}{6}}$$

8) (5, - 2) and (7,-8)

$x_1\ y_1 \quad x_2\ y_2$

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

$$m = \frac{-8-(-2)}{7-5}$$

$$m = \frac{-6}{2}$$

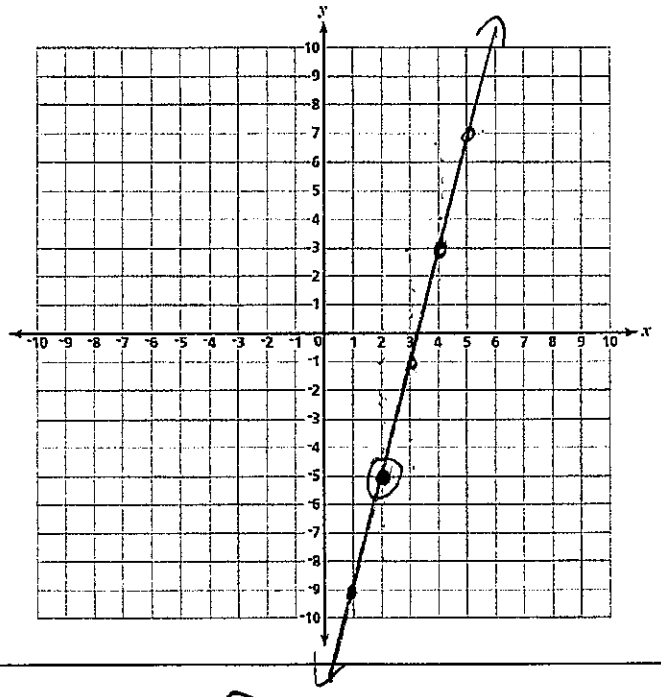
$$\boxed{m = -3}$$

For 9 & 10: Draw a line with the given slope, m, through the given point. Use the accompanying graph.

9) (2, -5); m =4

$x\ y$

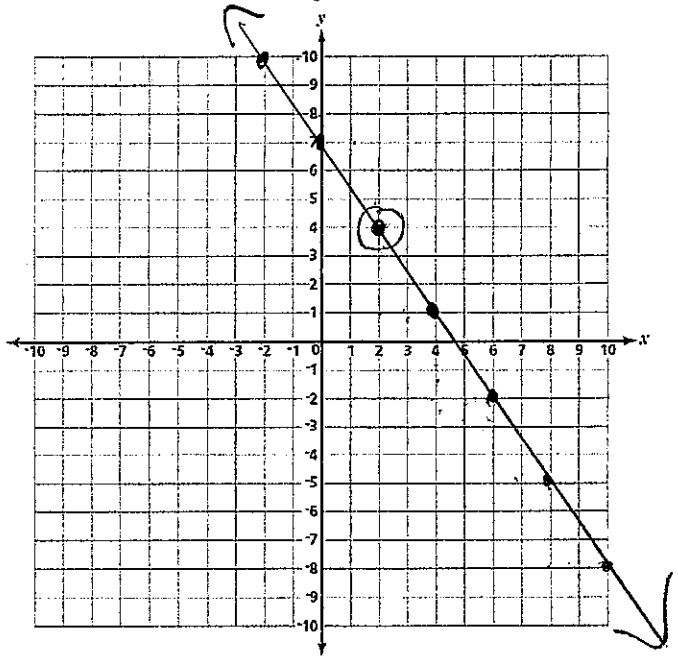
$$m = \frac{4}{1} \begin{matrix}\uparrow \\ \rightarrow\end{matrix}$$



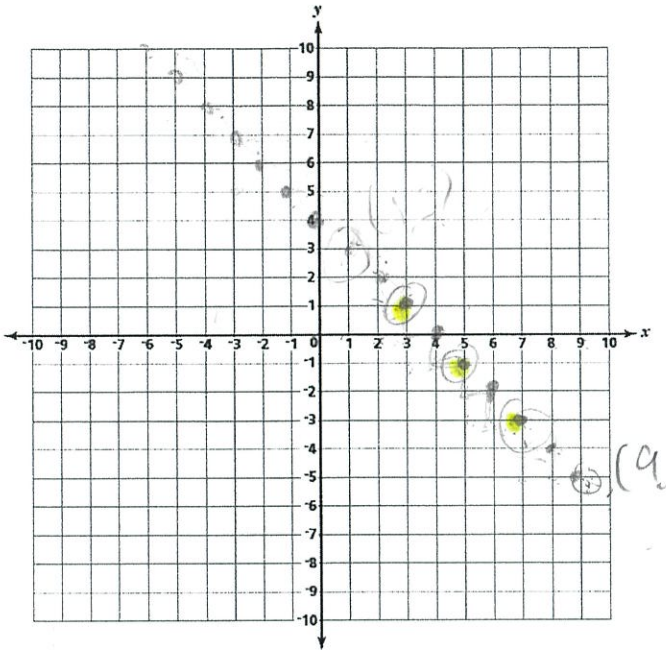
10) (2,4); m = $-\frac{3}{2}$

$x\ y$

$$m = \frac{-3}{2} \begin{matrix}\downarrow \\ \rightarrow\end{matrix}$$

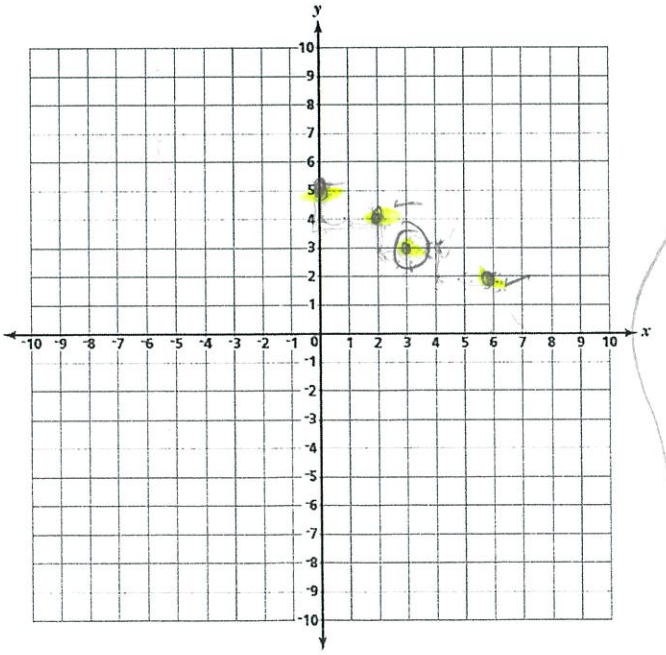


11) The points whose coordinates are (3,1), (5, -1), and (7, -3) all lie on the same line. What could be the coordinates of another point that lies on that line? Explain how you found your answer. You may use the coordinate plane below to help you.



(9,-5) I followed the pattern slope of down 1 right 2.

12) Of the points (0,5), (2,4), (3,3), and (6,2), which one does not lie on the same line as the other three? Explain how you found your answer. You may use the coordinate plane below to help you.



(3,3). It is NOT on the line. It does not follow the slope of down one, right two.