HW: Graphing Linear Equation Slope - Intercept Form

Name: Key

Math 7H – Jan. 3

Glue on page 75

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Directions: *Use the linear equation in the form $y = mx + b$ to graph each line. Then state the type of slope.*

$$y = \underbrace{m}_{\text{slope}}x + \underbrace{b}_{\text{y-intercept}}$$

Slope (m) $\frac{rise}{run}$

y-intercept (b)

1) $y = -2x + 8$

$y = mx + b$

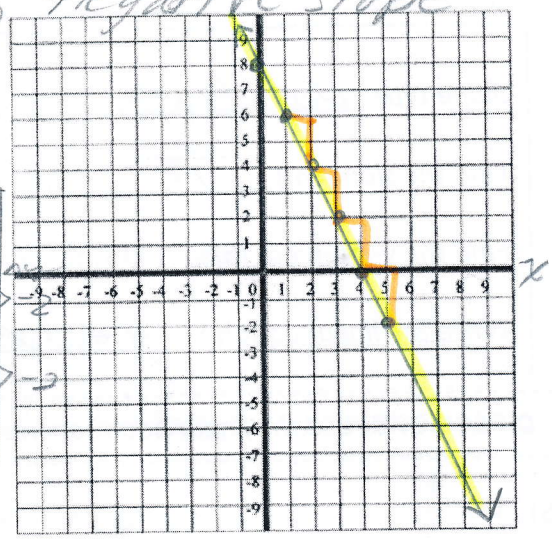
negative slope

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

$b = 8$

x	y
0	8
1	6
2	4

Δx +1 +1



2) $y = x - 6$

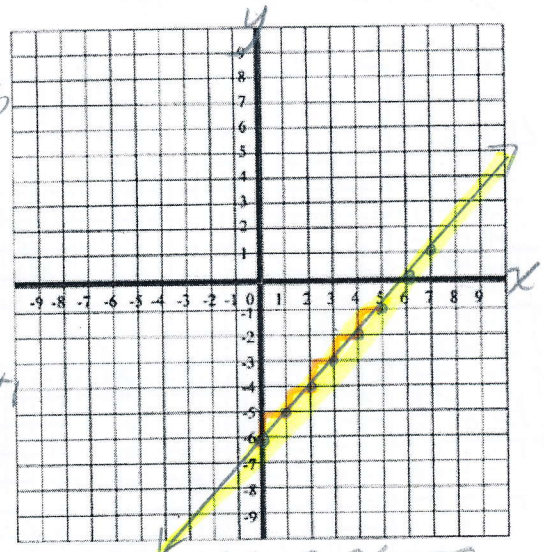
$y = mx + b$

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

$b = -6$

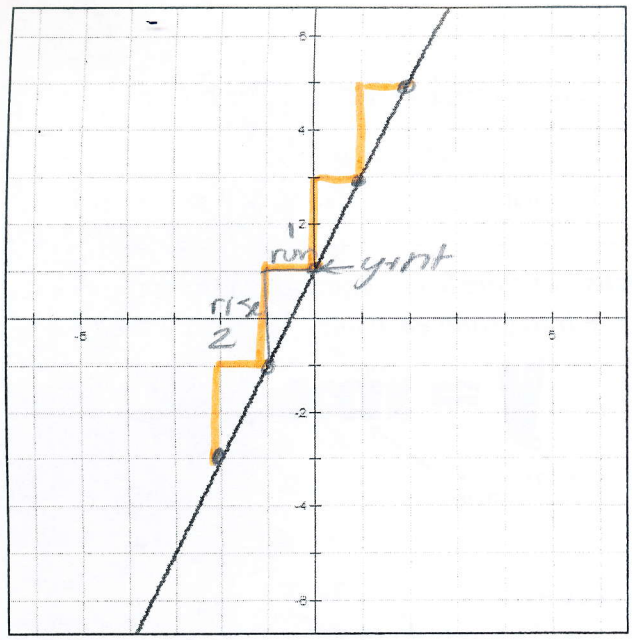
x	y
0	-6
1	-5
2	-4

+1 +1



positive slope

3)



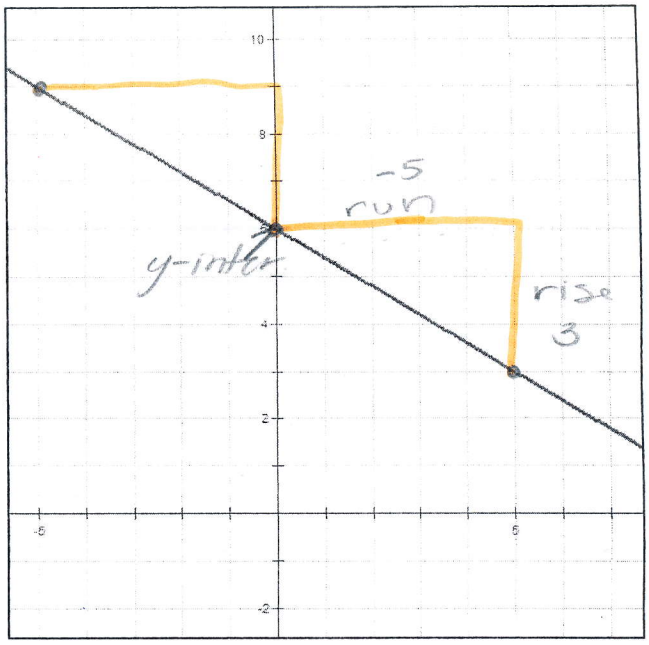
Slope type positive

Find the slope (m) $\frac{2}{1}$

Find the y-intercept (b) 1

Write the linear equation $y = 2x + 1$

4)



Slope type negative

Find the slope (m) $\frac{-3}{5}$

Find the y-intercept (b) 6

Write the linear equation $y = \frac{-3}{5}x + 6$

DIRECTIONS: *Use the linear equation in the form $y = mx + b$ to graph each line. Then state the type of slope.*

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

positive slope

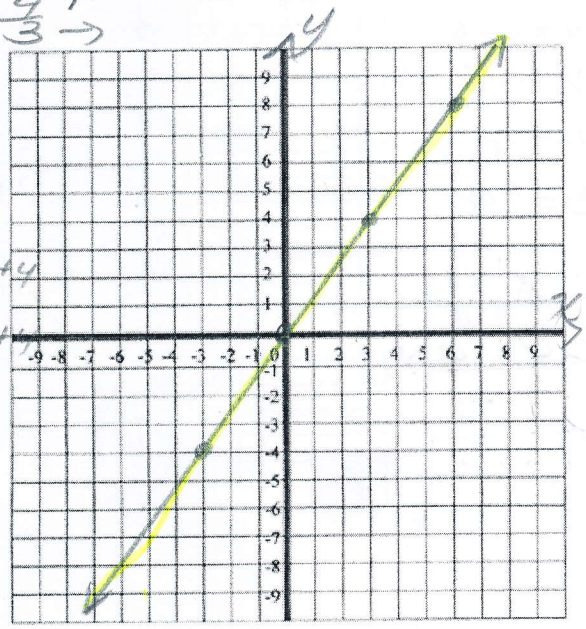
$y = mx + b$

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

$b = 0$

x	y
0	0
3	4
6	8

+3 +4 +3 +4



6) $y = -\frac{5}{3}x + 6$

negative slope

$y = mx + b$

$m = \frac{-5 \downarrow}{3 \rightarrow}$

$b = 6$

x	y
0	6
3	1
6	-4

+3 -5 +3 -5