30

x Games	y $
0	5
10	7.50
20	10
30	12.50

10<

10<

10<

2.50

2.50

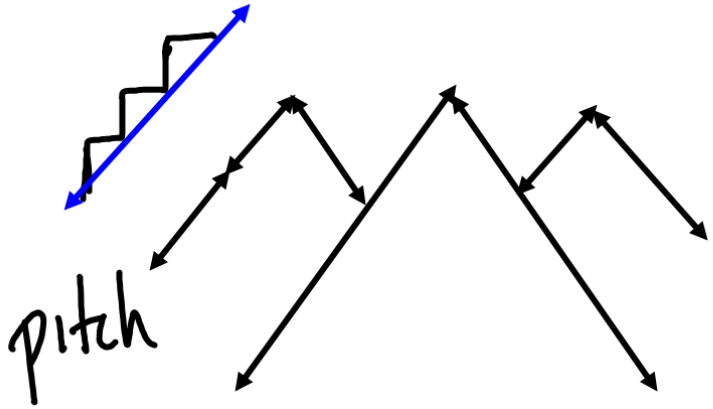
2.50

$y = mx + b$

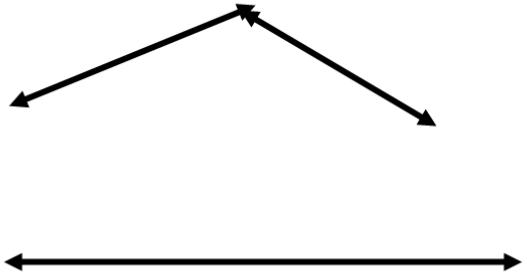
$y = \frac{1}{4}x + 5$

$m = \frac{2.50}{10}$

5.2 Slope



pitch



3%

$\frac{3}{100}$

Slope $\frac{\text{rise}}{\text{run}}$

$\therefore$ $\frac{\text{vertical change}}{\text{horizontal change}}$

$\frac{\text{difference of y's}}{\text{difference of x's}}$

(x_1, y_1)
(x_2, y_2)

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

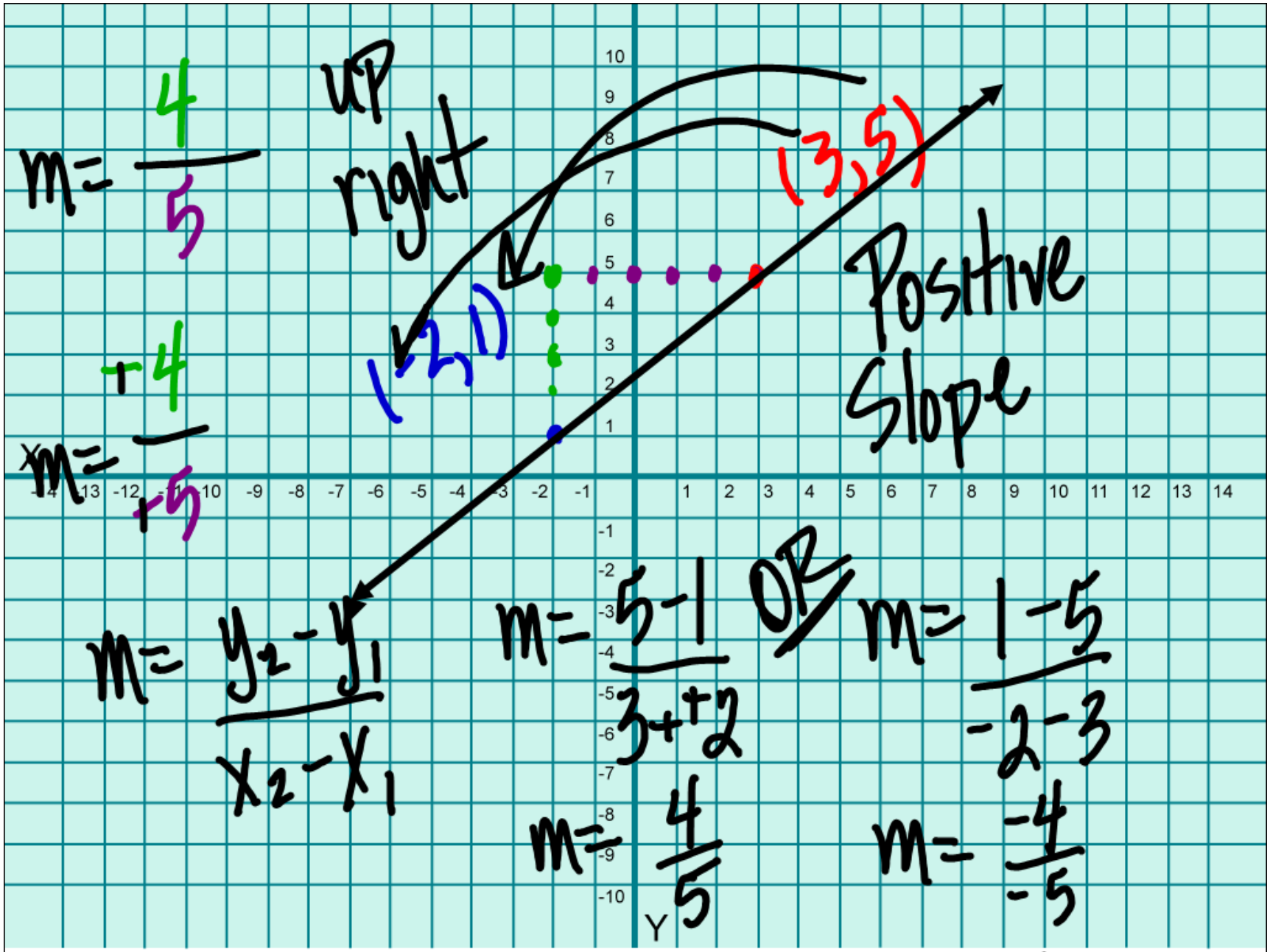
$(3, 1)$
$(2, -6)$

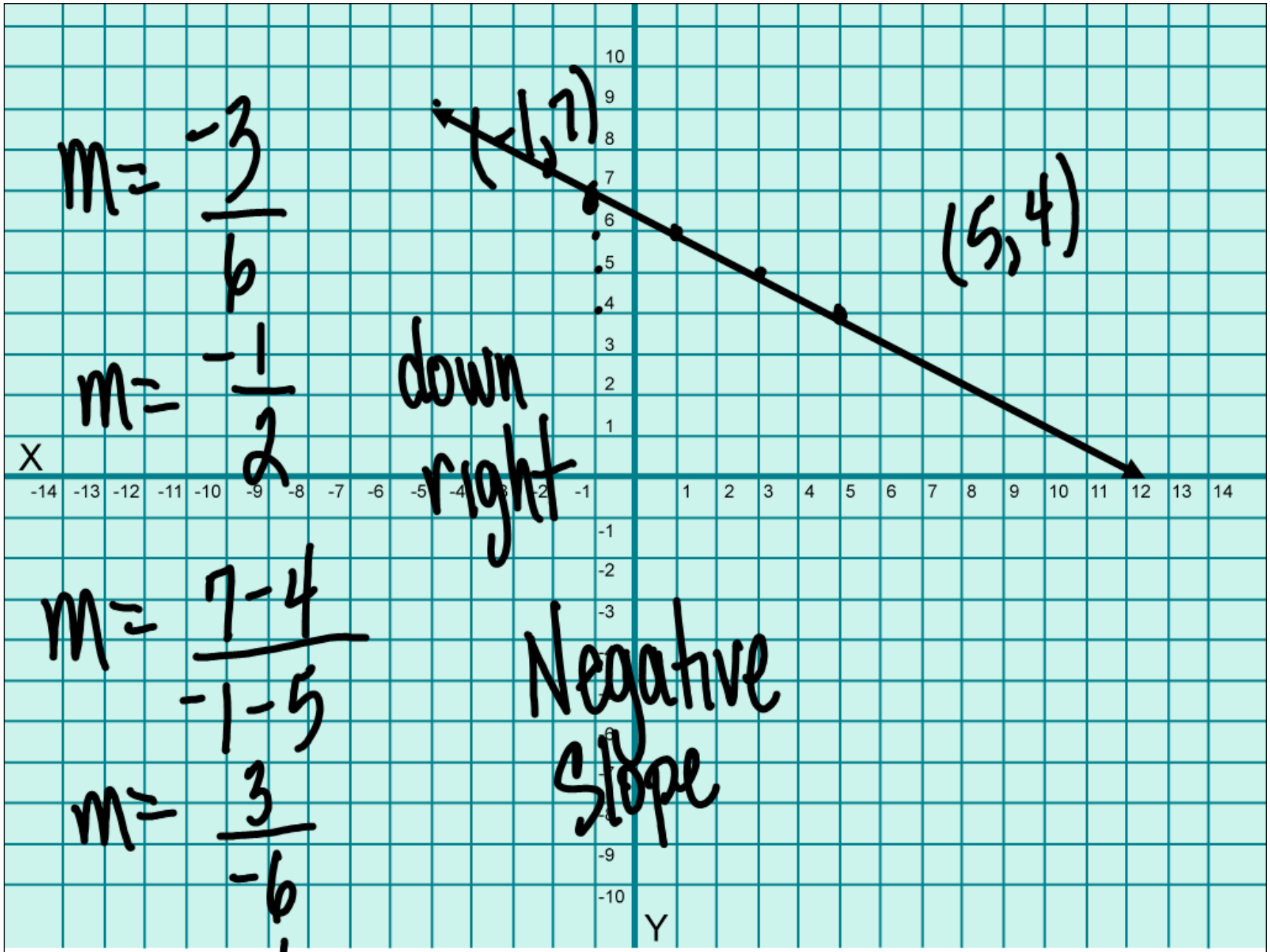
$$m = \frac{-6-1}{2-3}$$

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

$$m = \frac{1 + +6}{3-2}$$

$$m = \frac{7}{1} = 7$$


m = 4/5
up
right
(3,5)
(2,1)
Positive
Slope
+4
m =
+5
m = y2 - y1 / x2 - x1
m = 5-1 / 3+2 OR m = 1-5 / -2-3
m = 4/5
m = -4/-5
m = 4/5



$m = \frac{-3}{6}$

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

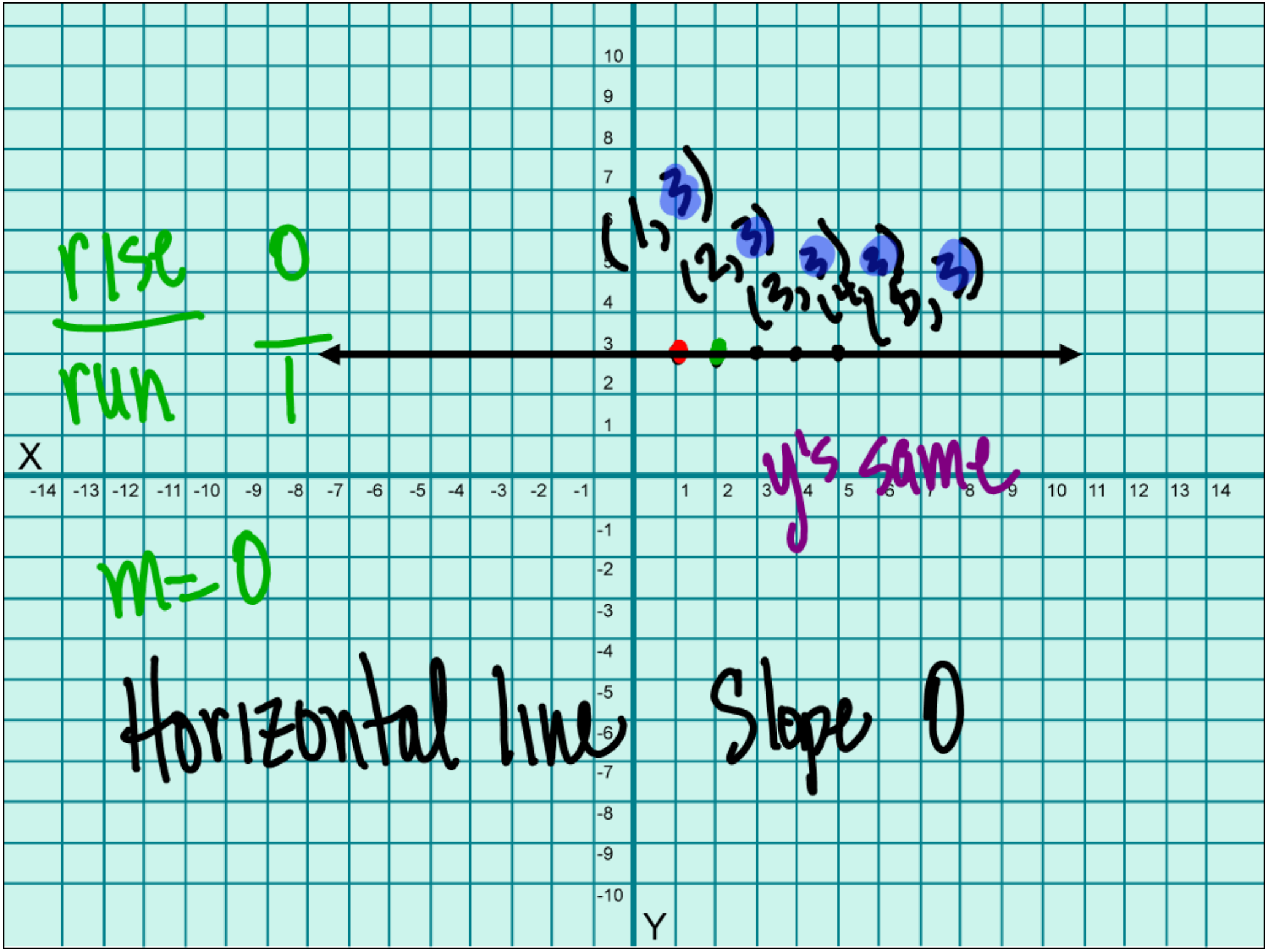
down right

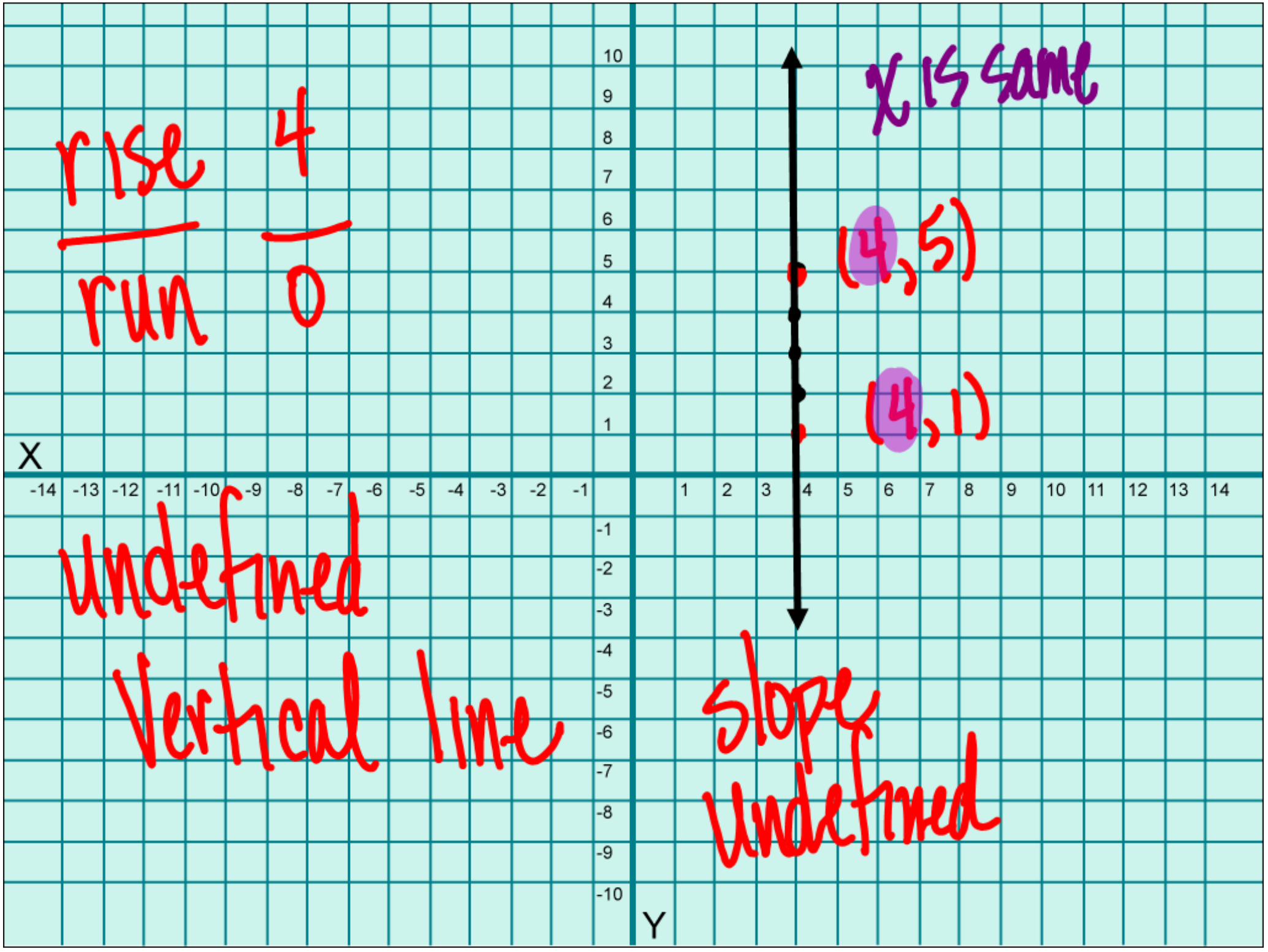
$m = \frac{7-4}{-1-5}$

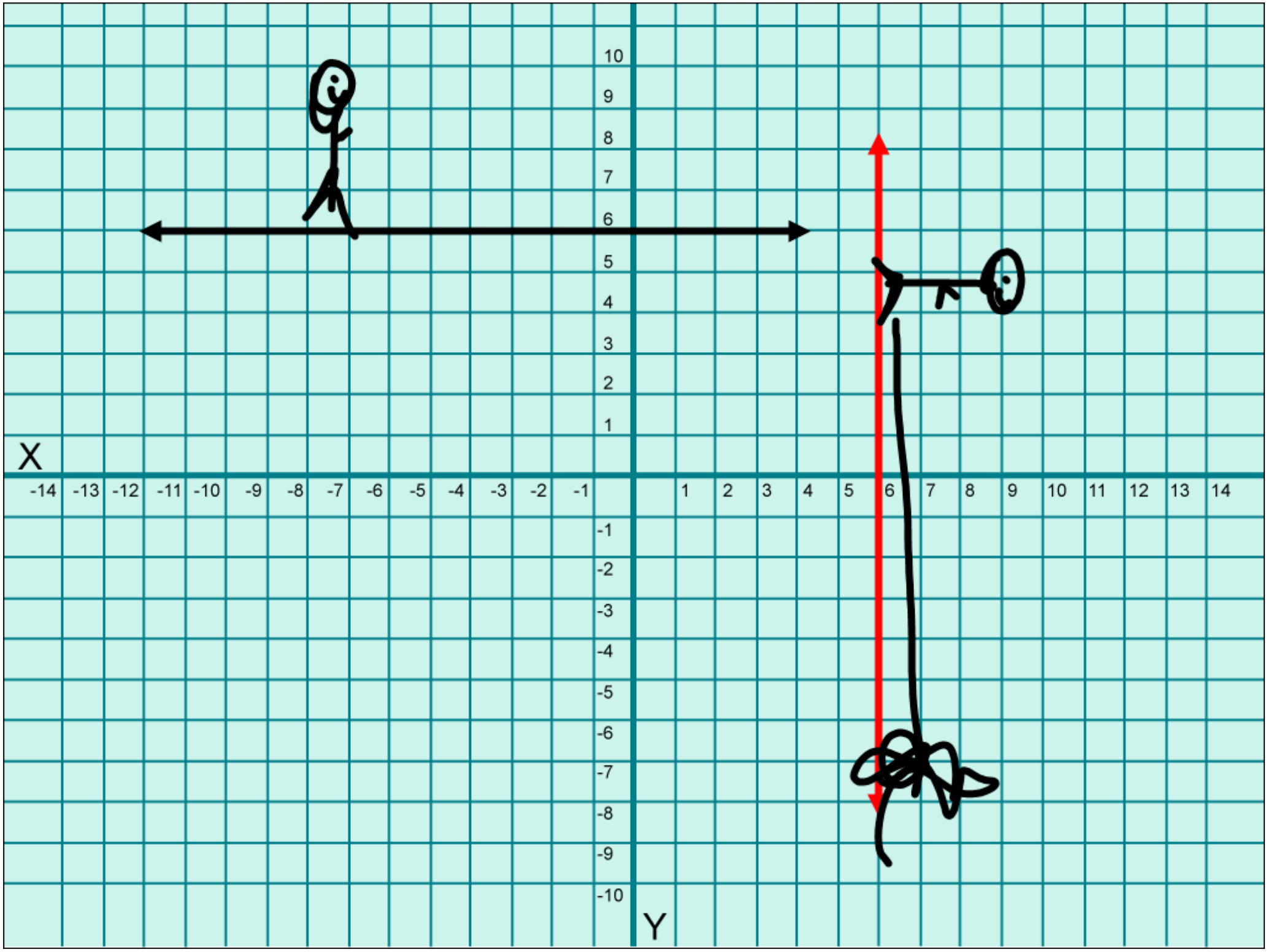
$m = \frac{3}{-6}$

Negative Slope

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


rise 0
run 1
(1, 3)
(2, 3)
(3, 3)
(4, 3)
(5, 3)
y's same
m = 0
Horizontal line Slope 0
X
Y


rise 4
run 0
x is same
(4,5)
(4,1)
undefined
Vertical line
slope undefined
X
Y


10
9
8
7
6
5
4
3
2
1
X
-14 -13 -12 -11 -10 -9 -8 -7 -6 -5 -4 -3 -2 -1
1 2 3 4 5 6 7 8 9 10 11 12 13 14
-1
-2
-3
-4
-5
-6
-7
-8
-9
-10
Y

p231

12-40 E

46 2 pictures

$\frac{6}{5}$