

Pg. 146 (5-15)

$$\frac{Y_{\text{start}} - Y_{\text{end}}}{X_{\text{start}} - X_{\text{end}}}$$

⑤  $y = -5x$

x	y	
-2	10	$-5(-2)$
-1	5	$-5(-1)$
0	0	$-5(0)$
1	-5	$-5(1)$
2	-10	$-5(2)$

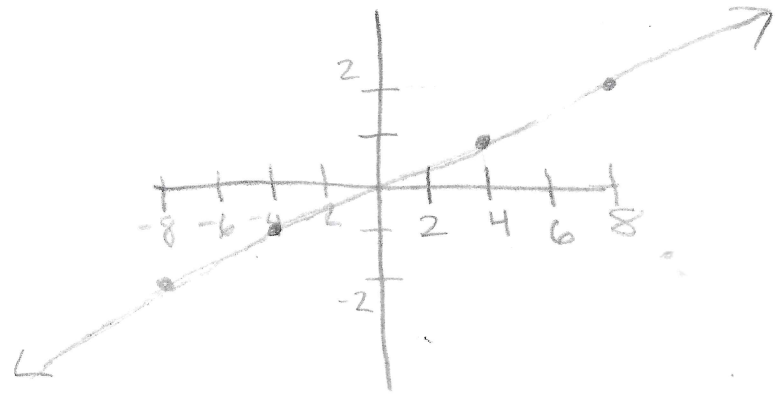


Start:  $(1, -5)$   
 End:  $(2, -10)$

$$\frac{-5 - (-10)}{1 - 2} = \frac{-5 + 10}{1 - 2} = \frac{5}{-1} = -5$$

⑥  $y = \frac{1}{4}x$

x	y	
-8	-2	$\frac{1}{4}x \frac{-8}{1} = \frac{-8}{4} = -2$
-4	-1	$\frac{1}{4}x \frac{-4}{1} = \frac{-4}{4} = -1$
4	1	$\frac{1}{4}x \frac{4}{1} = \frac{4}{4} = 1$
8	2	$\frac{1}{4}x \frac{8}{1} = \frac{8}{4} = 2$

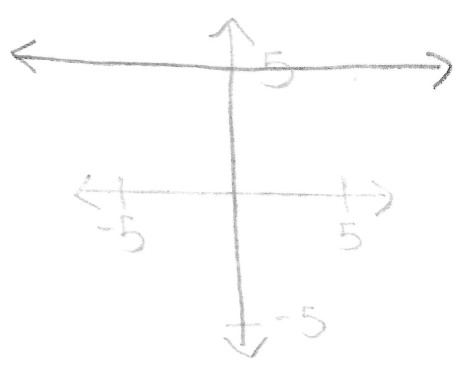


→ Pick numbers that are multiples of 4 to cancel out the fraction

Start:  $(4, 1)$   
 End:  $(8, 2)$

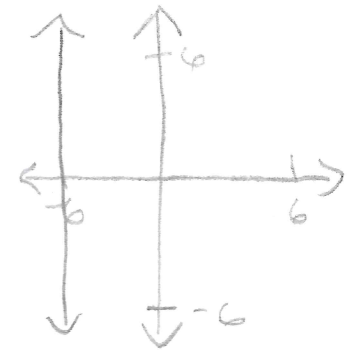
$$\frac{1 - 2}{4 - 8} = \frac{-1}{-4} = \frac{1}{4}$$

⑦  $y = 5$



Zero slope

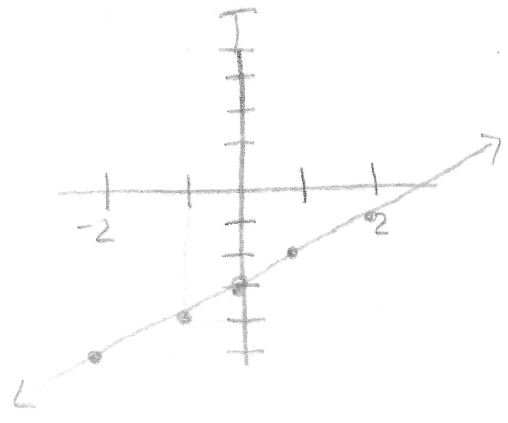
⑧  $x = -6$



undefined slope

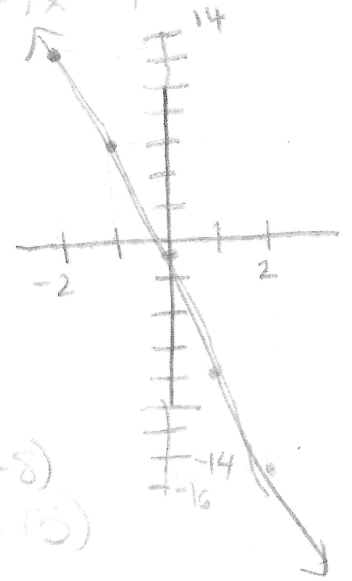
⑨  $y = x - 3$

x	y
-2	-5
-1	-4
0	-3
1	-2
2	-1



⑩  $y = -7x - 1$

x	y
-2	13
-1	6
0	-1
1	-8
2	-15



Start: (1, -8)  
End: (2, -15)

$$\frac{-8 - (-15)}{1 - 2} = \frac{-8 + 15}{-1} = \frac{7}{-1} = \textcircled{-7}$$

⑪  $y = -\frac{x}{3} + 4$

x	y
-6	6
-3	5
0	4
3	3
6	2

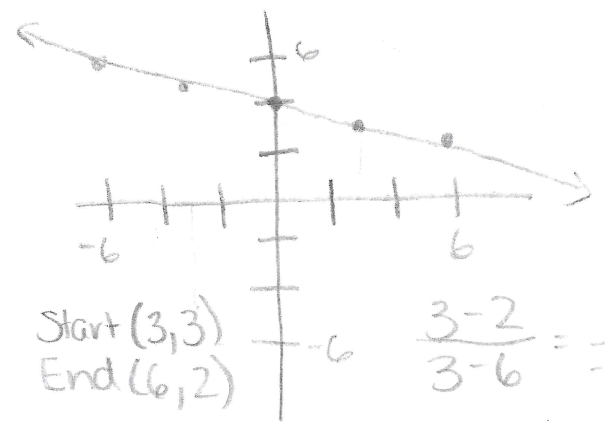
$$-\frac{-6}{3} + 4 = 2 + 4 = 6$$

$$-\frac{-3}{3} + 4 = 1 + 4 = 5$$

$$0 + 4 = 0 + 4 = 4$$

$$-\frac{3}{3} + 4 = -1 + 4 = 3$$

$$-\frac{6}{3} + 4 = -2 + 4 = 2$$



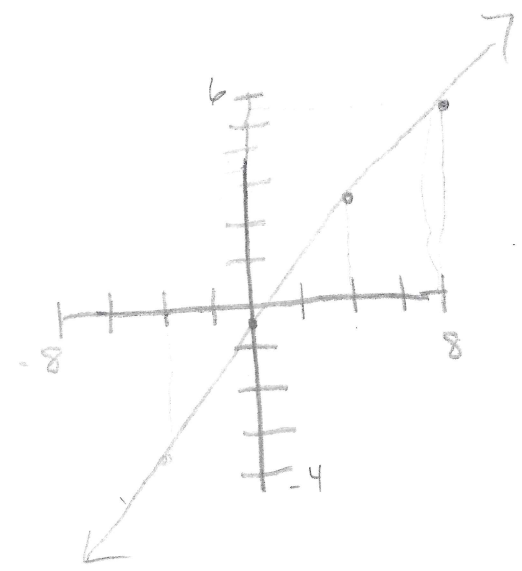
Start (3, 3)  
End (6, 2)

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

⑫  $y = \frac{3}{4}x - \frac{1}{2}$

x	y
-4	$-3\frac{1}{2}$
0	$-\frac{1}{2}$
4	$2\frac{1}{2}$
8	$5\frac{1}{2}$

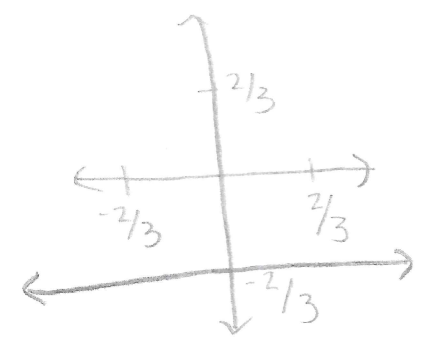
$\frac{-3}{4} \times \frac{4}{1} = \frac{-12}{4} = -3 - \frac{1}{2} = -3\frac{1}{2}$   
 $\frac{3}{4} \times \frac{4}{1} = \frac{12}{4} = 3 - \frac{1}{2} = 2\frac{1}{2}$   
 $\frac{3}{4} \times \frac{8}{1} = \frac{24}{4} = 6 - \frac{1}{2} = 5\frac{1}{2}$



Start (4, 2 1/2)  
End (8, 5 1/2)

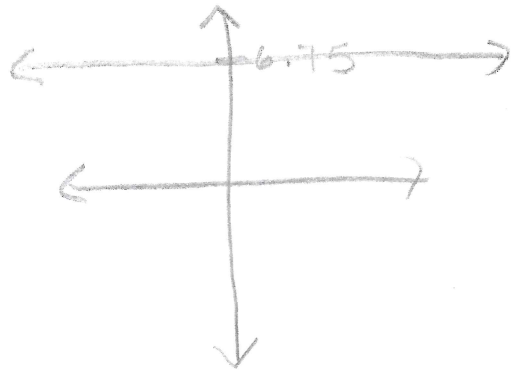
$$\frac{2\frac{1}{2} - 5\frac{1}{2}}{4 - 8} = \frac{-3}{-4} = \left(\frac{3}{4}\right)$$

⑬  $y = -\frac{2}{3}$



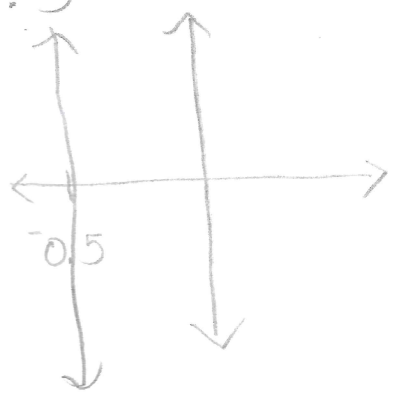
Zero slope

⑭  $y = 6.75$



Zero slope

⑮  $x = -0.5$



Undefined slope