

Final Review

$$3x - 2 = 6$$

$$3x = 6 + 2$$

$$\frac{3x}{3} = \frac{8}{3}$$

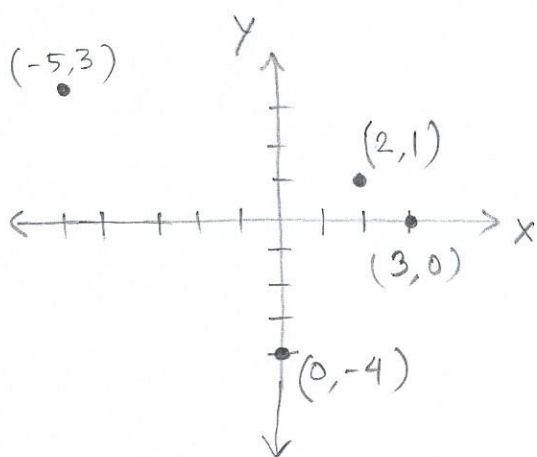
$$x = \frac{8}{3}$$



Linear Equation:

$$Ax + By = c$$

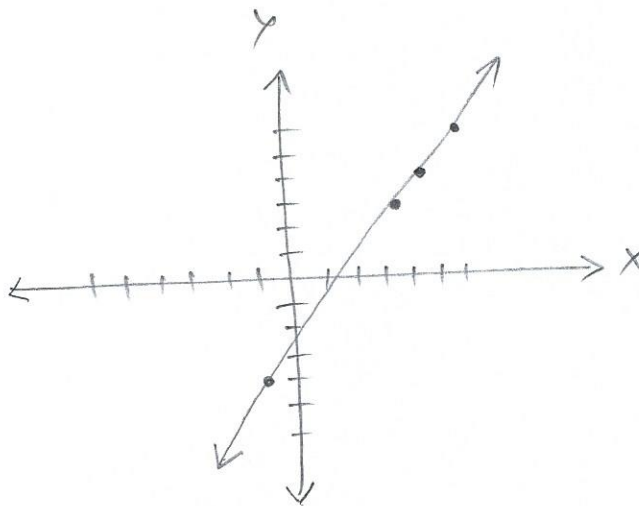
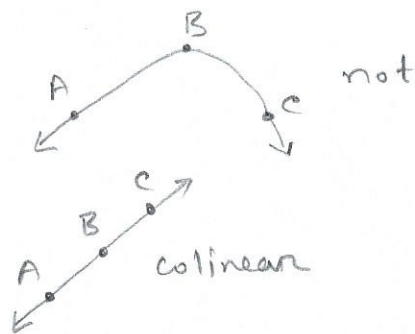
where A, B & C are real #s



$$3x - 2y = 6$$

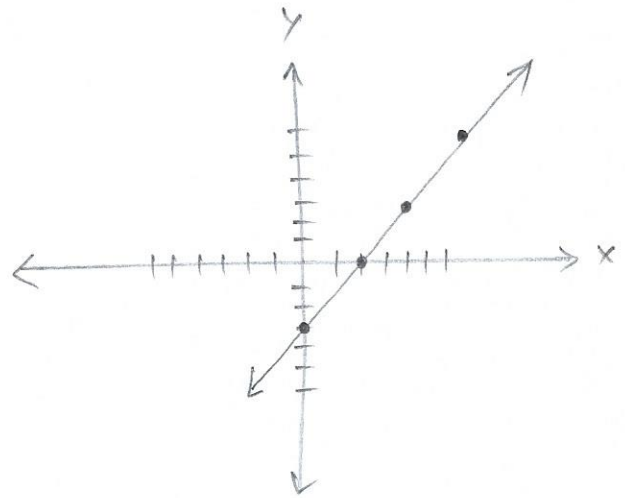
x	y	(x, y)
6	6	(6, 6)
-0.6	-4	(-0.6, -4)
5	4.5	(5, 4.5)
4	3	(4, 3)

Collinear:



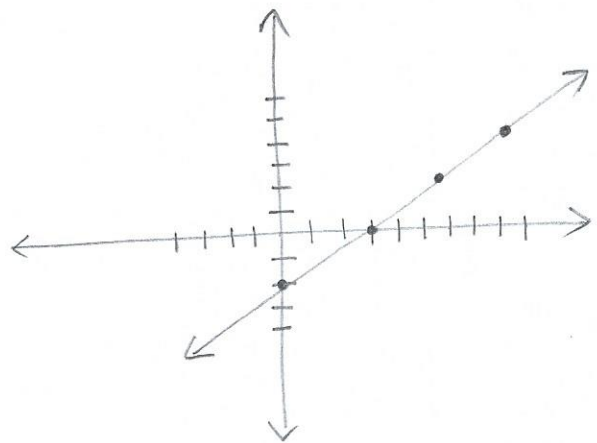
1a.  $3x - 2y = 6$

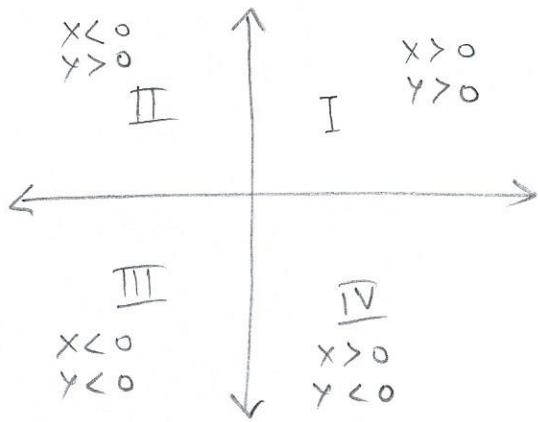
x	y	(x, y)
0	-3	(0, -3)
2	0	(2, 0)
4	3	(4, 3)
6	6	(6, 6)



1b.  $2x - 3y = 6$

x	y	(x, y)
0	-2	(0, -2)
3	0	(3, 0)
6	2	(6, 2)
9	4	(9, 4)





$(-2, 5) \rightarrow \text{II}$   
 $(5, -7) \rightarrow \text{IV}$   
 $(0, -2) \rightarrow \text{quadrantal point}$

x-intercept

( , 0 )

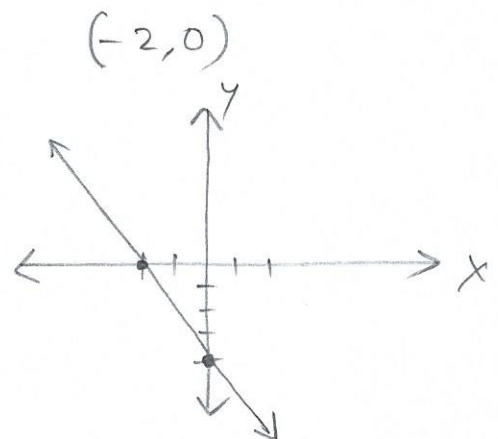
y-intercept

( 0, )

2a.  $-6x - 3y = 12$

x-intercept:  $-6x = 12$   
 $x = -2$

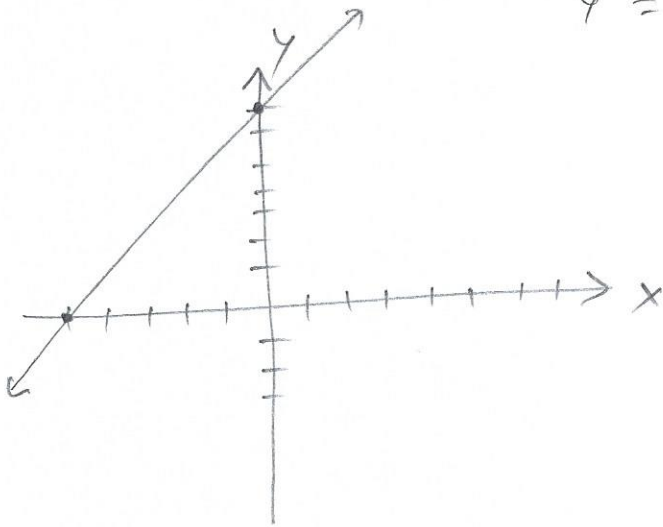
y-intercept:  $-3y = 12$   
 $y = -4$   
 $(0, -4)$



$$2b. 7x - 5y = -35$$

x-intercept:  $7x = -35$   
 $x = -5$   $(-5, 0)$

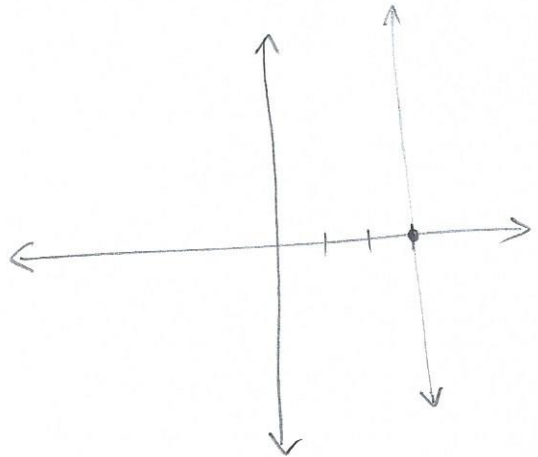
y-intercept:  $-5y = -35$   
 $y = 7$   $(0, 7)$



$$3a. 3x = 9$$

x-intercept:  $(3, 0)$

No y-intercept:



$$3b. \quad 2y + 8 = 0$$

No x-intercept

y-intercept:

$$(0, -4)$$

$$2y = -8$$

$$y = -4$$

