

Date: 11.21.18

Practice test 06

1. (a)

$$3x - 2y = 6$$

$$(0, \underline{-3}), (\underline{2}, 0), (4, \underline{3}), (\underline{6}, 6)$$

$$3(0) - 2y = 6$$

$$\Rightarrow \frac{-2y}{-2} = \frac{6}{-2}$$

$$\therefore y = -3$$

$$3x - 2(0) = 6$$

$$\Rightarrow \frac{3x}{3} = \frac{6}{3}$$

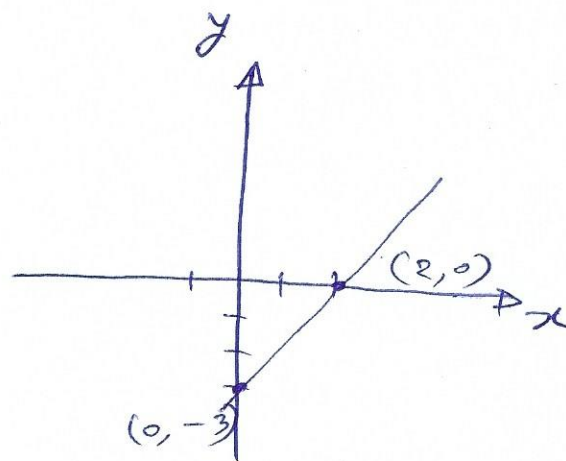
$$\therefore x = 2$$

$$3(4) - 2y = 6$$

$$\Rightarrow \frac{12 - 2y}{-2} = \frac{6}{-2}$$

$$\Rightarrow \frac{-2y}{-2} = \frac{-6}{-2}$$

$$\therefore y = 3$$



$$3x - 2(6) = 6$$

$$\Rightarrow 3x - 12 = 6 + 12$$

$$\Rightarrow \frac{3x}{3} = \frac{18}{3}$$

$$\therefore x = 6$$

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

$(0, -2), (3, 0), (6, 2), (9, 4)$

$$2(0) - 3y = 6$$

$$\Rightarrow \frac{-3y}{-3} = \frac{6}{-3}$$

$$\therefore y = -2$$

$$2x - 3(0) = 6$$

$$\Rightarrow \frac{2x}{2} = \frac{6}{2}$$

$$\therefore x = 3$$

$$2(6) - 3y = 6$$

$$\Rightarrow 12 - 3y = 6 - 12$$

$$\Rightarrow \frac{-3y}{-3} = \frac{-6}{-3}$$

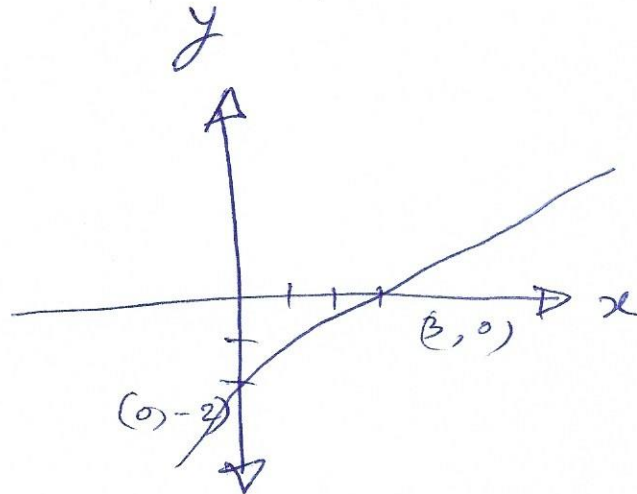
$$\therefore y = 2$$

$$2x - 3(4) = 6$$

$$\Rightarrow 2x - 12 = 6 + 12$$

$$\Rightarrow \frac{2x}{2} = \frac{18}{2}$$

$$\therefore x = 9$$



$$2. (a) \quad -6x - 3y = 12$$

x inter (, 0)

y inter (0 ,)

$$-6x - 3(0) = 12$$

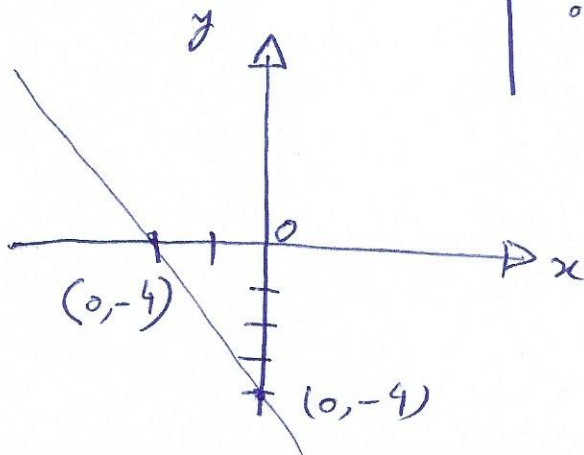
$$\Rightarrow \frac{-6x}{-6} = \frac{12}{-6}$$

$$\therefore x = -2$$

$$-6(0) - 3y = 12$$

$$\Rightarrow \frac{-3y}{-3} = \frac{12}{-3}$$

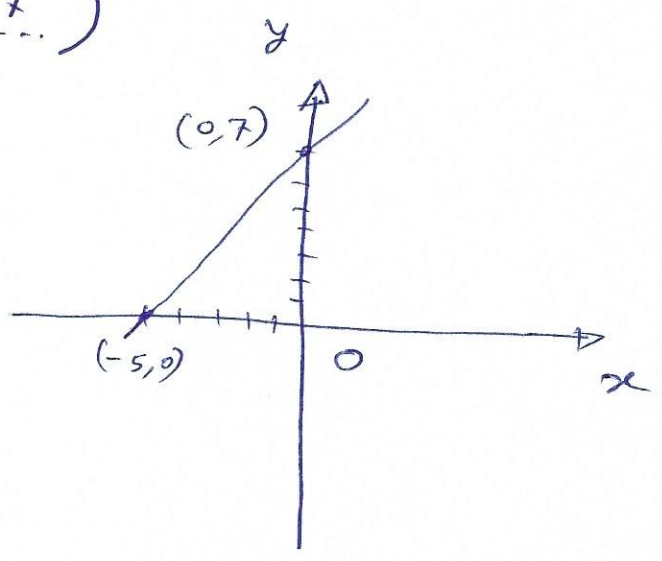
$$\therefore y = -4$$



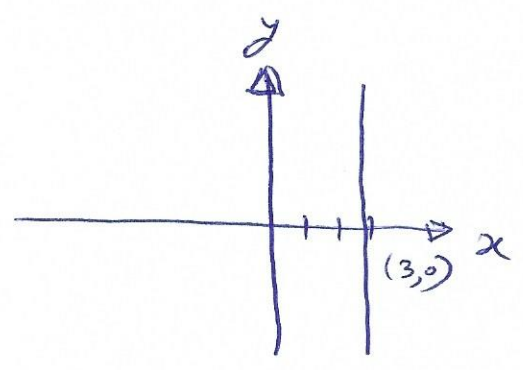
2. (b) $7x - 5y = -35$

x inter $(-5, 0)$

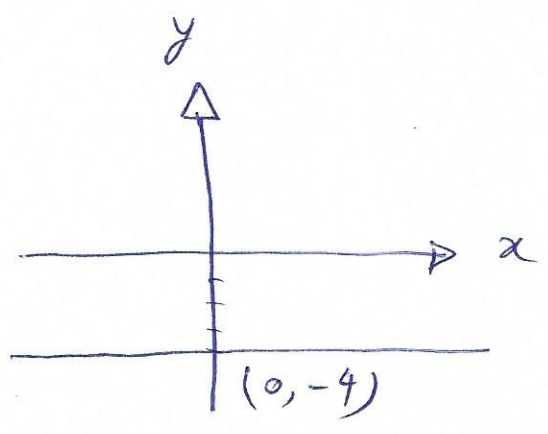
y inter $(0, 7)$



3. (a) $\frac{3x}{3} = \frac{9}{3}$
 $\therefore x = 3$

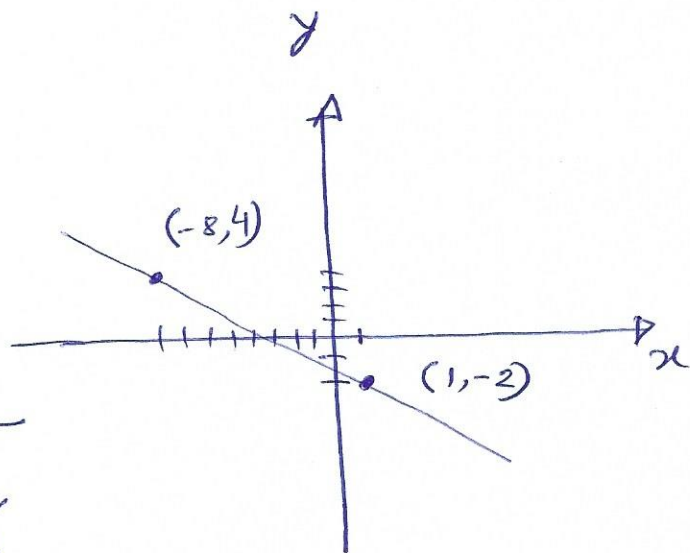


3. (b) $2y + 8 = 0$
 $\quad \quad \quad -8 \quad \quad -8$
 $\Rightarrow \frac{2y}{2} = \frac{-8}{2}$
 $\therefore y = -4$



4. (a)

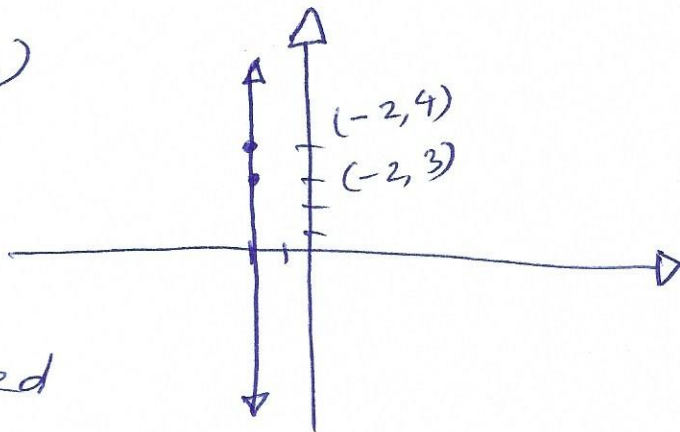
$$\begin{aligned} \text{slope} &= -\frac{6}{9} \\ &= -\frac{2}{3} \end{aligned}$$



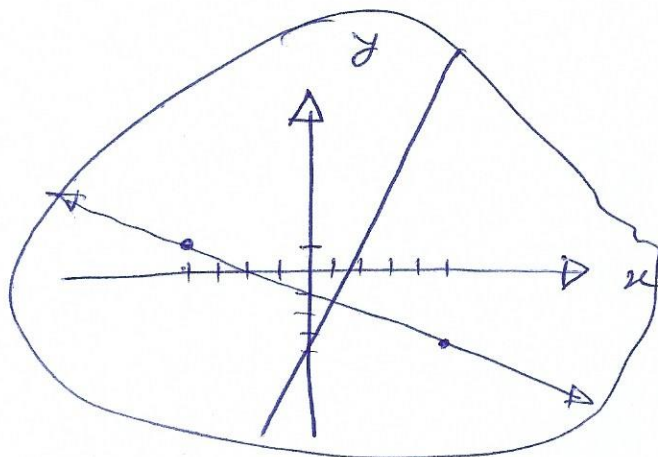
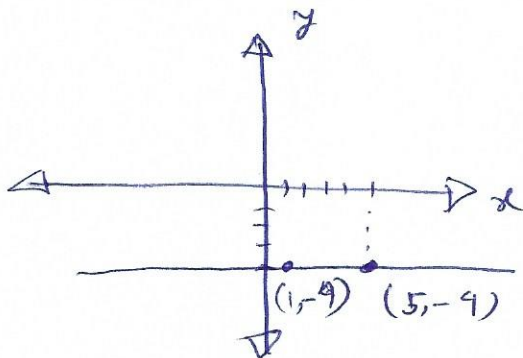
[it falls left to right slope is negative.]

4. (b) (-2, 4), (-2, 3)

$$\begin{aligned} \text{slope} &= \frac{1}{0} \\ &= \text{undefined} \end{aligned}$$

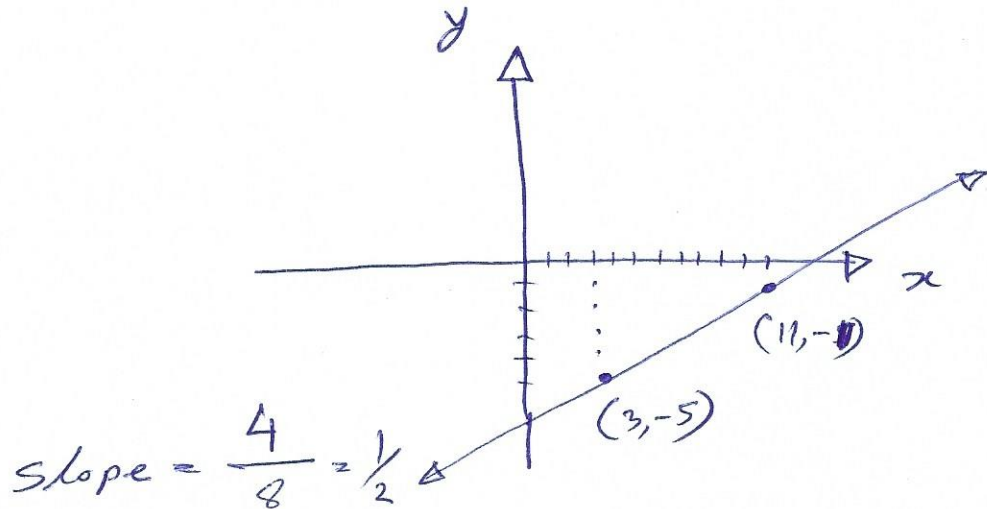


4. (c) (5, -4), (1, -4)



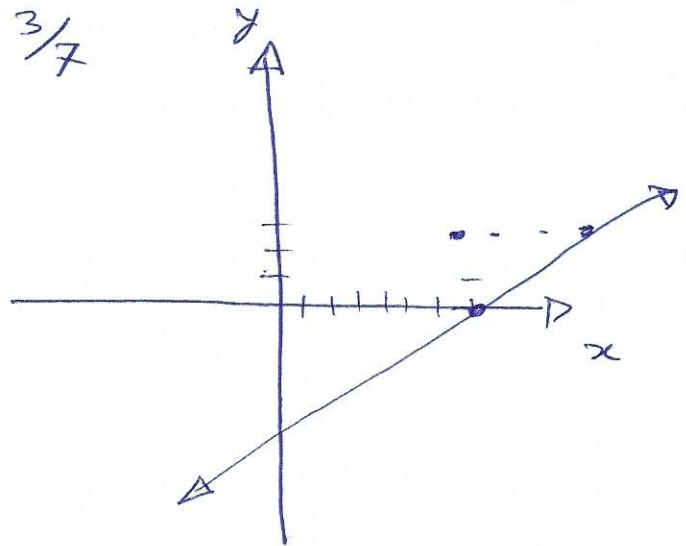
slope = 0

4. (d) $(11, -1)$; $(3, -5)$



Formula, slope = $\frac{y_2 - y_1}{x_2 - x_1} = \frac{-5 + 1}{3 - 11} = \frac{1}{2}$

5. (a) $(0, -2)$ slope = $\frac{3}{7}$



5. (b) $(3, -1)$ slope = $-\frac{1}{4}$

