pendicular, y=mx+b, finding "k", intercepts

$$m = \frac{0}{-7}$$
$$= 0$$

$x_1 \, y_1$ $x_2 \, y_2$ **1.** $m = \dfrac{-7 - -7}{-2 - 5}$

hrough (5, -7)) and (-2, -7).

$x_2 \, y_2$

(11 , k). Find k if the slope is parallel to the x-axis.

(y + 7) = 5x - 6.

-9, 8). Find the value of k if the slope is parallel to y=7x-6.

k, 9) . Find k if the slope of the line is perpendicular to 5/6.

resented by 10(x+4) = 5(5y-2).

(2k, 6). Find k if the slope of the line is parallel to -3/7.

x-intercept of 7 and a y-intercept of -9.

k) and (-8k, 6). Find k if the slope of the line

2x + 4y = 16.

2. $\dfrac{K+1}{11-6} = \dfrac{0}{1}$

$\dfrac{K+1}{5} = \dfrac{0}{1}$

$K(+1) = 0$

$K = -1$

3. $3(y+7) = 5x-6 \quad -21$

$3y (+21) = 5x - 6$

$\dfrac{3y}{3} = \dfrac{5x}{3} - \dfrac{27}{3}$

$y = \dfrac{5}{3}x - 9$

$m = \dfrac{-3}{5}$

4. $(\overset{x_1 \; y_1}{K, -4})(\overset{x_2 \; y_2}{-9, 8})$ $m = \dfrac{7}{1}$

$$\frac{7}{1} = \frac{8 + 4}{-9 - K}$$

$$\frac{7}{1} = \frac{12}{-9 - K}$$

$7(-9 - K) = 12$
-63
$\boxed{-63} - 7K = 12 + 63$

$\dfrac{-7K}{-7} = \dfrac{75}{-7}$ $K = \dfrac{75}{-7}$

5. $(\overset{x_1\ y_1}{6,7})(\overset{x_2\ y_2}{5k,9})$ $m = \dfrac{-6}{5}$

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

$\dfrac{-6}{5} = \dfrac{9-7}{5k-6}$

$\dfrac{-6}{5} = \dfrac{2}{5k-6}$

$-6(5k-6) = 10$

$-30k + 36 = 10 - 36$

$\dfrac{-30k}{-30} = \dfrac{-26}{-30}$

$k = \dfrac{13}{15}$

6. $10(x+4) = 5(5y-2)$

$$10x + 40 = 25y - 10$$

$$25y - 10 = 10x + 40$$

$$\frac{25y}{25} = \frac{10x}{25} + \frac{50}{25}$$

$$y = \frac{2}{5}x + 2$$

$$m = \frac{2}{5}$$

7.
$$\overset{x_1 \; y_1}{(2K, 0)} \quad \overset{x_2 \; y_2}{(3K, 6)} \qquad m = \frac{-3}{7}$$

$$\frac{-3}{7} = \frac{6-0}{3K - 2K}$$

$$\frac{-3}{7} = \frac{6}{1K}$$

$$\frac{-3K}{-3} = \frac{42}{-3}$$

$$K = -14$$

8. $\overset{x_1 \ y_1}{(7,0)} \ \overset{x_2 \ y_2}{(0,-9)}$

$$\frac{-9-0}{0-7}$$

$$\frac{-9}{-7}$$

$$m = \frac{9}{7}$$

9.

$$\overset{x_1\ y_1}{\left(3, 5K\right)} \quad \overset{x_2\ y_2}{\left(-8K, 6\right)} \qquad y = \left(\frac{6}{3}\right)x + 11$$

$$\frac{-1}{2}X = \frac{6 - 5K}{-8K - 3}$$

$$= 2$$

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

$$2(6 - 5K) = -1(-8K - 3)$$

$$\boxed{12} - 10K = \boxed{+8K} + 3 - 12$$

$$\frac{-18K}{-18} = \frac{-9}{-18}$$

$$K = \frac{1}{2}$$

8

10.

$$12X + 4y = 16$$

$$\frac{4y}{4} = \frac{-12X}{4} + \frac{16}{4}$$

$$y = -3x + 4$$

$$m = \frac{1}{3}$$

12. State the sl

a)

$\times 5 \quad \times 5 \quad \times 5 \quad \times 5$

$2/5y + 4 = 2x + 2$

$2y + 20 = 10x + 10$

$\dfrac{2y}{2} = \dfrac{10x}{2} - \dfrac{10}{2}$
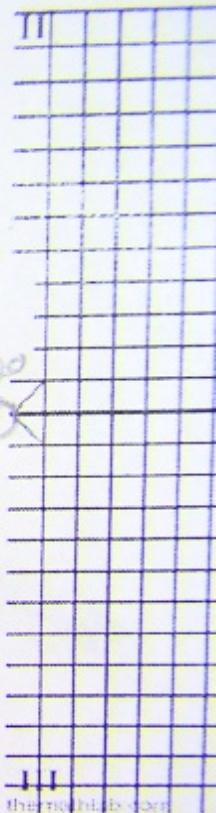
$y = 5x - 5$

$-7k = \dfrac{75}{7}$ $k = \dfrac{75}{-7}$

12 b) $6(2y + 1) = 2(7x - 9)$

$12y + 6 = 14x - 18 - 6$

$\dfrac{12y}{12} = \dfrac{14x}{12} - \dfrac{24}{12}$

$y = \dfrac{7}{6}x - 2.$

6.

Equation: _____   **Equation:** _____

e the slope, and y-intercept, then graph.
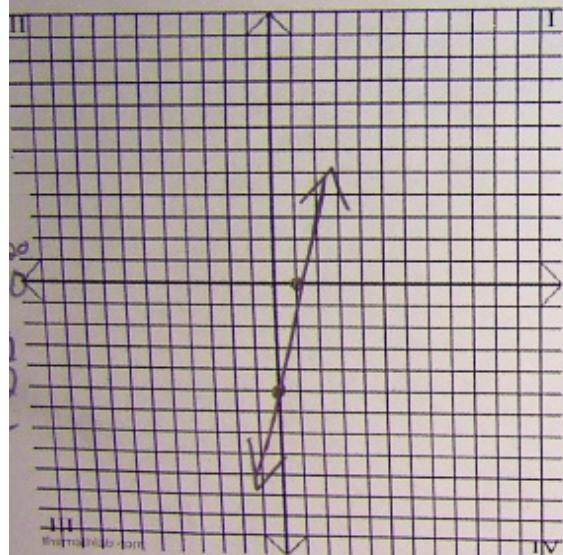
Slope (m): ___5___   5/1

Y-intercept(b): ___−5___

b)
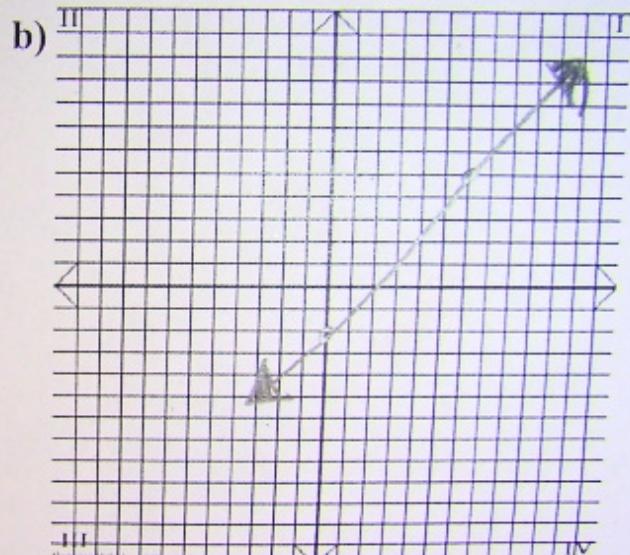
Slope (m): ___7/6.___

Y-intercept(b): ___−2.___

13. **Wanda wants a charm bracelet that costs $25 and**
    a) **Write the equation to represent the situation**
    b) **How much will it cost for 8 charms?**
    c) **How many charms can Wanda purchase for**

a) $y = 9x + 25$

b) $y = 9(8) + 25$
$= 72 + 25$
$= 97$

c) $110 \overset{-25}{=} 9x + 25 \overset{-25}{\cdot}$
$\dfrac{85}{9} = \dfrac{9x}{9}$
$x = 9.4$
9 ch