

2-4 Practice Worksheet examples (Worksheet Due Monday)

$$3\left(\frac{2}{3}x + \frac{4}{7}y = 1\right) \cdot 2$$

$$14x + 12y = 21$$

$$12y = -14x + 21$$

$$y = -\frac{14}{12}x + \frac{21}{12}$$

$$y = -\frac{7}{6}x + \frac{7}{4}$$

$$m = -\frac{7}{6}, \quad b = \frac{7}{4}$$

$$y = mx + b$$

(Prob #1-4)
alike

Graph prob # 5-8

$$5. \quad 3x - 5y = 15$$

$$-5y = -3x + 15$$

$$y = \frac{3}{5}x - 3$$

↑ start here
(0, -3)
move 3↑ 5→

#5-8
alike

#9-10 alike

9. $m = -5$ $(a, b) = (-3, -8)$

$$y - b = m(x - a)$$

$$y + 8 = -5(x + 3)$$

$$y + 8 = -5x - 15$$

$$y = -5x - 23$$

11. $(\underline{4}, 3)$ and $(7, -2)$

$$m = \frac{y_2 - y_1}{x_2 - x_1} = \frac{-2 - 3}{7 - 4} = \frac{-5}{3}$$

#11-14 alike

$$m = -\frac{5}{3} \quad (a, b) = (4, 3)$$

$$y - b = m(x - a)$$

$$y - 3 = -\frac{5}{3}(x - 4)$$

$$y - 3 = -\frac{5}{3}x + \frac{20}{3}$$

$$y = -\frac{5}{3}x + \frac{29}{3}$$

$$3 = \frac{9}{3}$$

#15-18 alike

$$15. \text{ X-int} = 3 \\ (3, 0)$$

$$\text{y-int} = 2 \\ (0, 2)$$

Formula

$$m = \frac{-\text{y-int}}{\text{X-int}}$$

$$-\frac{2}{3}$$

 $\leftarrow m$

$$Y = mX + b$$

$$Y = -\frac{2}{3}X + 2$$

 \leftarrow plug into $\leftarrow b$