## Section 4.3 Exercises Part B

3.1 Fill out the table for each of the following:

**1.** 2x - 5y = 11 **2.**  $y = \frac{7}{2}x + 6$  **3.**  $y = \frac{7}{2}x + 6$  **3.**  $y = \frac{7}{2}x + 6$  **4.**  $y = \frac{7}{2}x + 6$  **5.**  $\frac{7}{2} = \frac{1}{2}$  **7.**  $\frac{1}{2} = \frac{1}{2}$ 

Graph the following lines, and label x and y intercepts.

**3**. 4x - 2y = 10 **4**.  $y = -\frac{5}{3}x - 6$  **5**. y = 5x

## Find the slope between each pair of points.

6. (3,-2) (7,3)7. (9,1) (-7,6)8. (5,-1) (-3,-8)9. (-2,9) (-2,3)10. (-5,2) (5,6)11. (19,1) (6,1)

**12.** Explain the difference between a slope of zero and an undefined slope.

## Graph the following lines giving one point and the slope.

13.	-3x + 4y = 10	<b>14</b> . $y = 2x - 7$	15.	$y = \frac{2}{5}x - 4$
<b>16</b> .	y = 17	<b>17</b> . $y = -\frac{3}{7}x - 2$	<b>18</b> .	2x - 6y = 12

## Write the equations of the lines with the slopes and points:



Thus the answer is 4x - 7y = 1.

/ Ex. Write an equation of the line that has slo	pe m = $\frac{4}{7}$ , and goes through the point (2,1). Put the			
answer in Slope-Intercept Form.				
From the slope $m = \frac{4}{7}$ , J know that the equation must look like:				
$\mathbf{y} = \frac{4}{7}\mathbf{x} + \mathbf{b}$	Put the point in to see what b is.			
$1 = \frac{4}{7}(2) + b$				
$1 - \frac{8}{7} = b$				
$-\frac{1}{7} = b$				
Thus the answer is $y = \frac{4}{7}x - \frac{1}{7}$ .				

**19**. Write an equation of the line that has slope m=-3, and goes through the point (-4,6). Put the answer in Standard Form.

**20.** Write an equation of the line that has slope  $m=\frac{5}{8}$ , and goes through the point (3,6). Put the answer in Standard Form.

**21.** Write an equation of the line that has slope  $m=-\frac{2}{3}$ , and goes through the point (1,-3). Put the answer in Slope-Intercept Form.

**22.** Write an equation of the line that has slope  $m=-\frac{4}{5}$ , and goes through the point (5,-3). Put the answer in Slope-Intercept Form.

**23.** Write an equation of the line that has slope m= 2, and goes through the point (0,5). Put the answer in Slope-Intercept Form.

**24.** Write an equation of the line that has slope  $m=-\frac{1}{7}$ , and goes through the point (-4,7). Put the answer in Standard Form.

Answers:



Assignment 4.3b