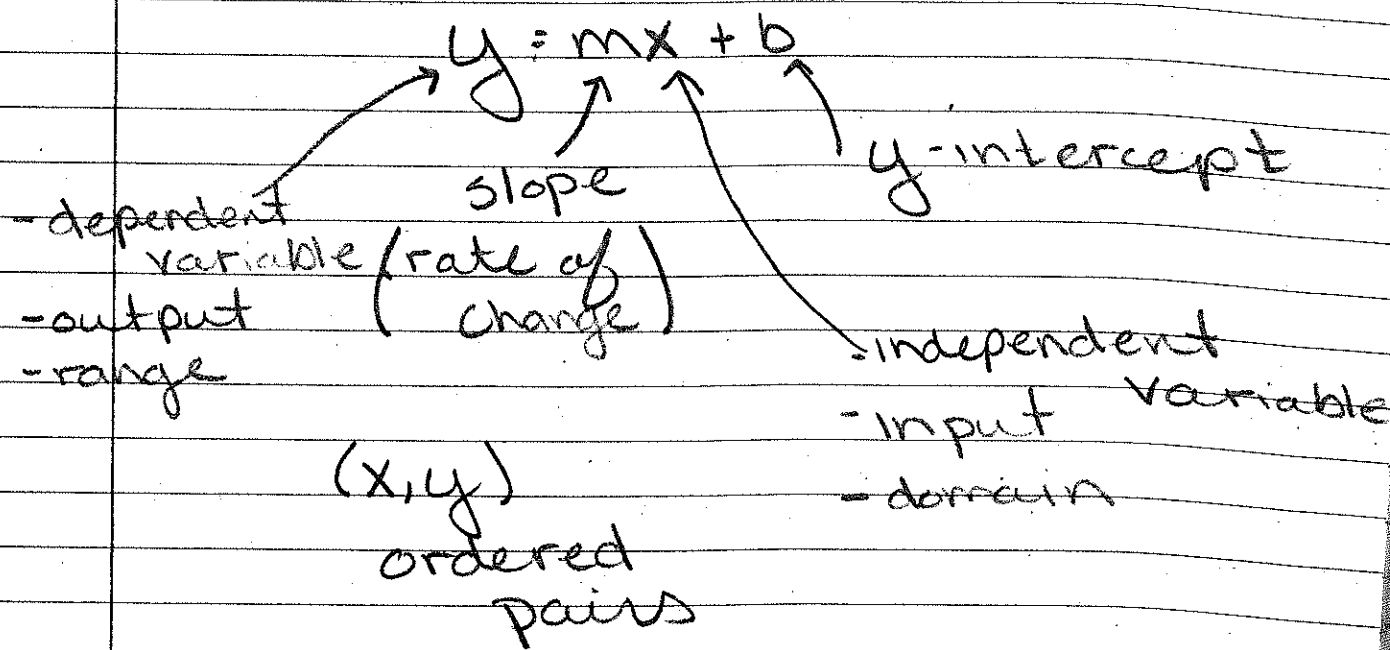


Jan 21<sup>th</sup>

# 6-2 Slope Intercept Form



write an equation - evaluate

$m = -2$     $b = 8$     $y = -2x + 8$

$m = -\frac{4}{8}$     $b = 0$     $y = -\frac{1}{2}x$

$m = 0$     $b = 4$     $y = mx + b$

Horizontal    $y = 0x + 4$

Line    $y = 0 + 4$   
 $y = 4$

Identify the slope + y-intercept

$$y = -3x + 1 \quad m = -3 \quad b = 1$$

$$y = \frac{7}{6}x - \frac{3}{4} \quad m = \frac{7}{6} \quad b = -\frac{3}{4}$$

$$y = -\frac{4}{5}x \quad m = -\frac{4}{5} \quad b = 0$$

$$y = -6 - \frac{1}{2}x \quad m = -\frac{1}{2} \quad b = -6$$

$$y = -\frac{1}{2}x - 6$$

\* Slope (m) should NEVER be a mixed number or a decimal \*

Solve for y to identify the slope + y-intercept.

$$\begin{array}{r} y - 9x = \frac{1}{2} \\ +9x \quad +9x \end{array}$$

$$y = 9x + \frac{1}{2}$$

$$m = 9$$

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

$$2y - 6 = 3x$$
$$\begin{array}{r} +6 \\ +6 \end{array}$$

$$\frac{2y}{2} = \frac{3x+6}{2}$$

$$\frac{2y}{2} = \frac{3x+6}{2}$$

$$y = 3x + 3$$

$$y = \frac{3}{2}x + 3$$

OR

$$y = \frac{3}{2}x + 6$$

$$m = \frac{3}{2}$$

$$b = 3$$

$$\frac{-2(3+y)}{-2} = \frac{4x}{-2}$$

$$\text{OR } -2(3+y) = 4x$$

$$\frac{-6-2y}{+6} = \frac{4x}{+6}$$

$$\frac{3+y}{-3} = \frac{-2x}{-3}$$

$$\frac{-2y}{-2} = \frac{4x+6}{-2}$$

$$y = -2x - 3$$

$$y = -2x - 3$$

Pg. 294 #2-20 Evens  
#41-47 All