

$$\text{Dom } f(x) = [-1, 4]$$

$$\text{Range } f(x) = (3, 12)$$

$$g(x) = -2f(3x+4) - 5$$

Dom

$$\begin{array}{ccc} -1 & \leq & 3x+4 \leq & 4 \\ -4 & & -4 & -4 \end{array}$$

$$\frac{-5}{3} \leq \frac{3x}{3} \leq \frac{0}{3}$$

$$-\frac{5}{3} \leq x \leq 0$$

$$\text{Dom } g(x) = \left[-\frac{5}{3}, 0\right]$$

$$\text{Range } g(x) = (-29, -11)$$

Range

$$\begin{array}{ccc} 3 & < & -2x-5 & < & 12 \\ 11 & & 11 & & 12 \end{array}$$

$$+24$$

$$\begin{array}{ccc} -2 & & -2 & & -2 \end{array}$$

$$\begin{array}{ccc} -6 & > & x-5 & > & -24 \\ -5 & & -5 & & -5 \end{array}$$

$$-11 > x > -29$$

2.

$$3x + 7y = 2$$

-3x                      -3x

$$\frac{7y}{7} = \frac{-3x + 2}{7}$$

$$y = -\frac{3}{7}x + \frac{2}{7}$$

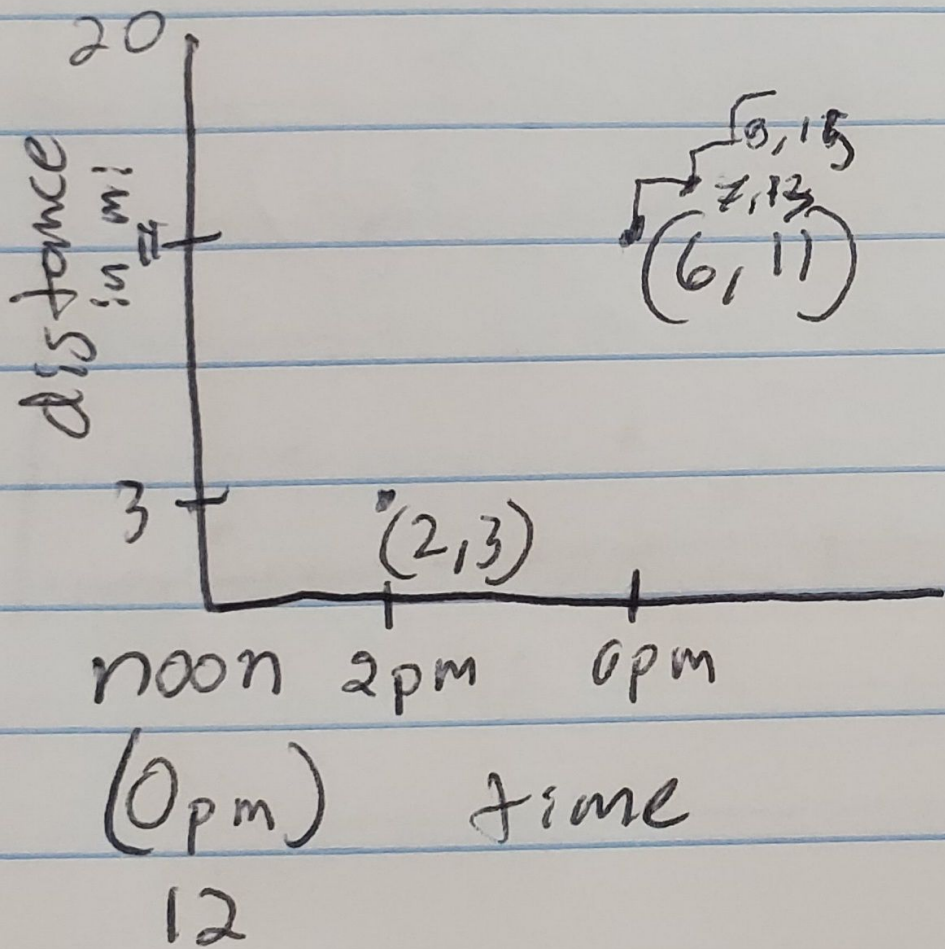
negative reciprocal  
= 7/3x

$$y - 8 = \frac{7}{3}(x - 1) \rightarrow y = \frac{7}{3}x - \frac{7}{3} + 8$$

$$y = \frac{7}{3}x + \frac{24}{3} - \frac{7}{3} \rightarrow$$

$$y = \frac{7}{3}x + \frac{17}{3}$$





$$m = \frac{11 - 3}{6 - 2} \rightarrow 2$$

$$m = 2$$

At 9pm I will  
have walked 17 miles