

Day 6 Homework: Slope-Intercept Form

1. For collecting credit card applications, Barry's daily pay is \$20 plus \$5 per application he collects.

- a. If you were to graph this situation, what would the y-intercept be? _____
- b. What is the slope? _____ What does it represent? _____
- c. Write a NOW-NEXT and formal recursive rule for this situation. Include the start # (a_0)

- d. Represent this situation using an equation in slope-intercept form. _____
- e. If Barry collects 43 applications, then how much will he be paid? _____
- f. If Barry is paid \$510.00, then how many applications did he collect?

$$\begin{array}{r} \$510 = 5x + 20 \\ -20 \quad -20 \\ \hline 490 = 5x \end{array}$$

$$\frac{490}{5} = \frac{5x}{5}$$

$$98 = x$$

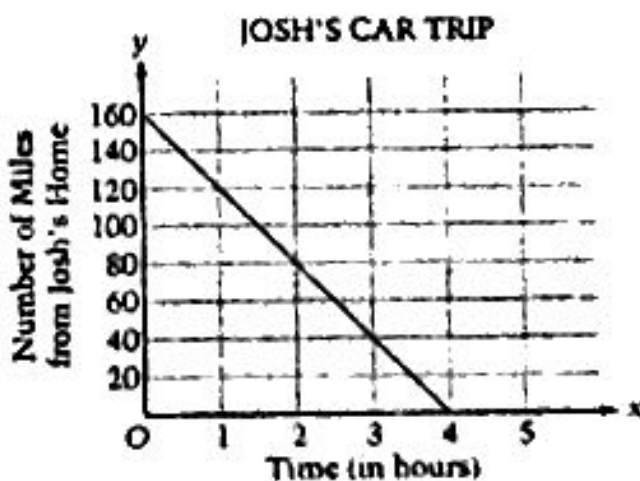
98 applications

2. The time-distance graph shows Josh's car trip home.

- a. According to the graph, how much time did Josh spend driving?

- b. Was Josh walking away from home or towards home?

- c. Approximately how far from home was Josh when he began his trip?



- d. How fast is Josh traveling (What is his rate of change?)

$$\frac{\text{change } y}{\text{change } x} = \frac{-160}{4} =$$

- e. What is the slope? _____ f. What is the y-intercept? (0, 160)

- f. What is the equation for the line in slope-intercept form?
