Algebra P3
Homework # 9

Name:

1. Josie wants to make some cookies, so she turns on her oven. In 2 minutes, the oven is at 150 degrees. In 5 minutes, it's at 270 degrees.

a. Write two points for this situation.

b. Find the slope of the line for the oven's temperature.

c. Find the equation of the line (in slope-intercept form).

d. What is y-intercept? What is the meaning of the y-intercept in the context of this problem? (Write a sentence!)

e. What is the meaning of the slope in the context of this problem? (Write a sentence)

2. David is driving down the road, and sees an accident up ahead. He starts to brake. 3 seconds later, he is at 40 mph, while 5 seconds after he first started to brake his speed is 22 mph.

a. Write two points for this situation.

b. Find the slope of the line for the speed of the car.

c. Find the equation of the line (in slope-intercept form).

d. What is the meaning of the y-intercept in the context of this problem?

e. What is the meaning of the slope in the context of this problem?

f. Find the *x-intercept* and write it as a point. What is its meaning in the context of the problem?

3. Annette's mom has been measuring Annette's height her whole life. At age 1 year, Annette was 28 inches tall. At 3 years, Annette was 37 inches. The graph is to help you if you want.

a. Find the equation of the line for Annette's age (in slope-intercept form).

b. What is the meaning of the y-intercept in the context of this problem?

c. What is the meaning of the slope in the context of this problem?

4. Alexa's grandfather gave her some money for college, but she didn't stop to count it. She barely uses it at all, and six months later, she has $390. In 18 months she has $310.

a. Find the equation of the line for her money.

b. What is the meaning of the y-intercept in the context of this problem?

c. What is the meaning of the slope in the context of this problem?

d. Find the *x-intercept* and write it as a point. What is its meaning in the context of the problem?

e. Usually college takes four years. Will Alexa run out of money before she graduates?