Slope

Chapter 4 Test   Ms. Angie
Name_____   Date_____
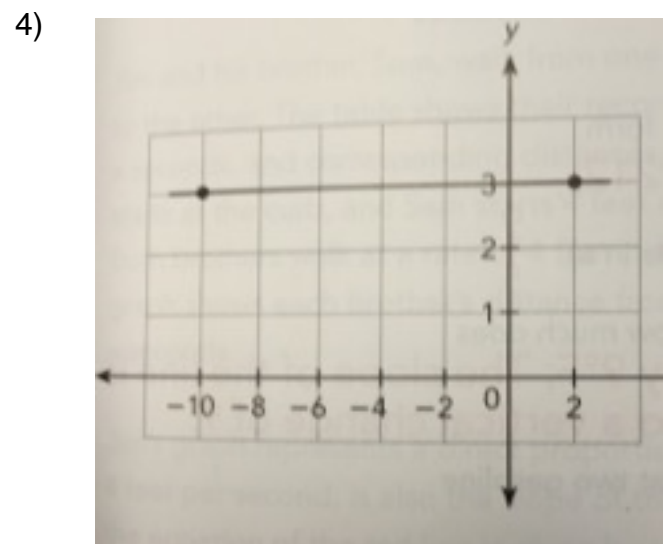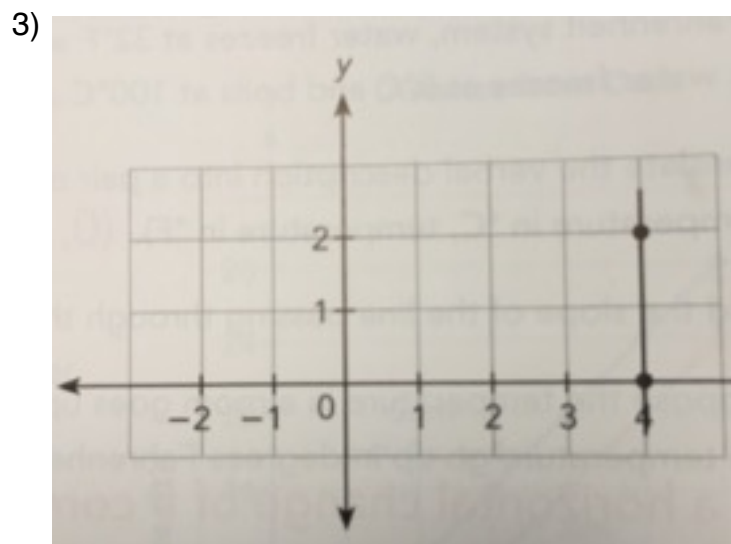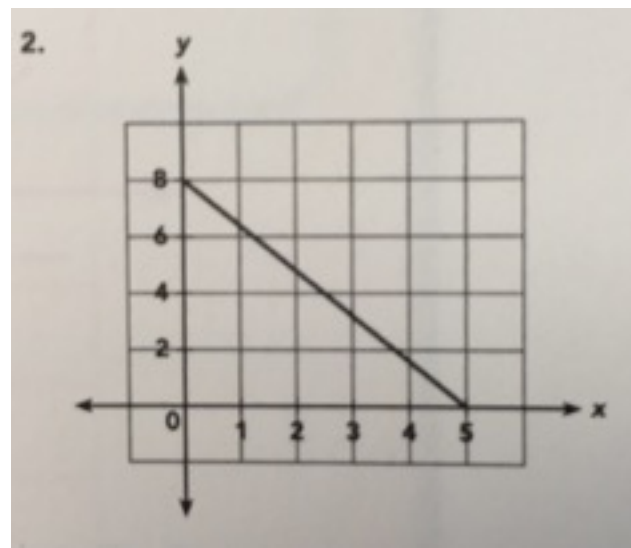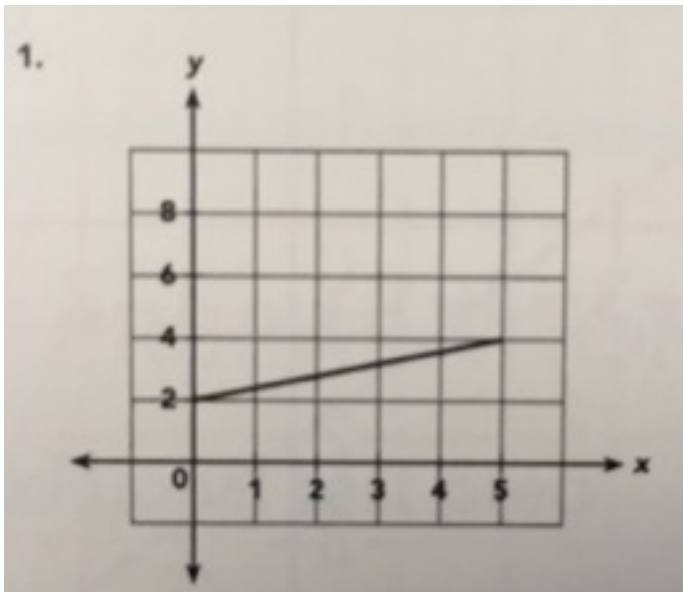Class_____

Show all your work and box your final answer.

Find the slope of each line.

1.

2.

3)

4)

Find the slope of the line passing through each pair of points.

4.)   (4, 8) (2, 0)   5.)   (0,6) (3,0)

Using the given slope and y-intercept of a line write an equation in slope-intercept form.

6.)   Slope, m = 2   7.)   Slope, m = -3
      y-intercept b = 3   y-intercept, b = 4
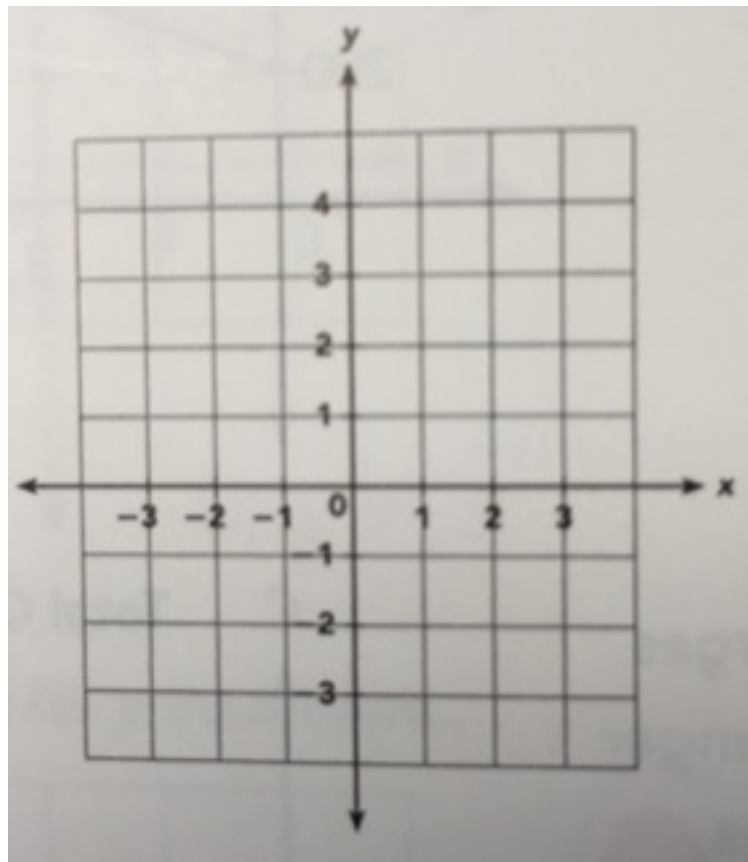
Write an equation of the line that has the given slope and passes through the given point.

7.) Slope, m = -1 (0, 2)   8.) Slope, m = 1/2; (2, -1)
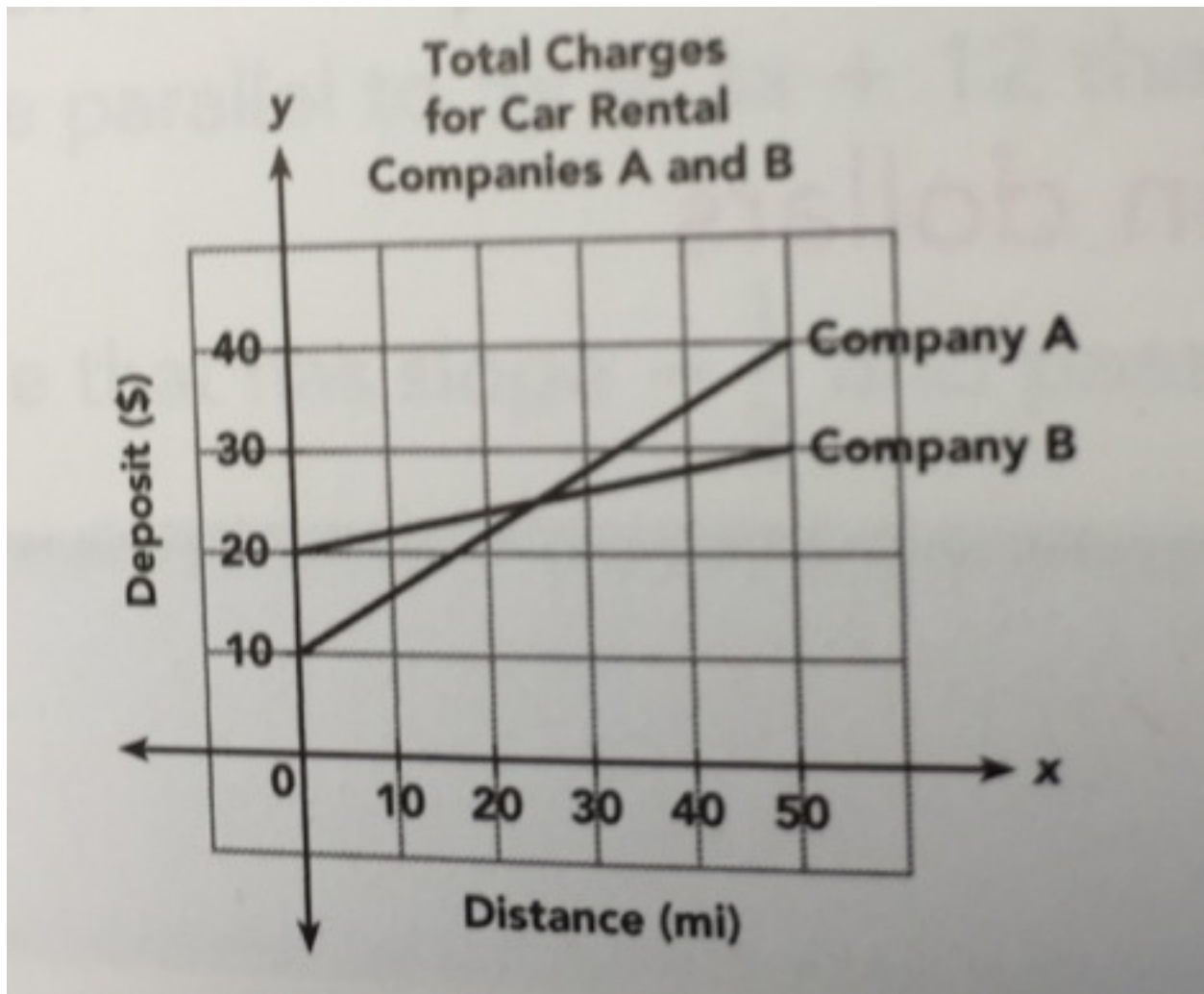
Solve. Show your work.

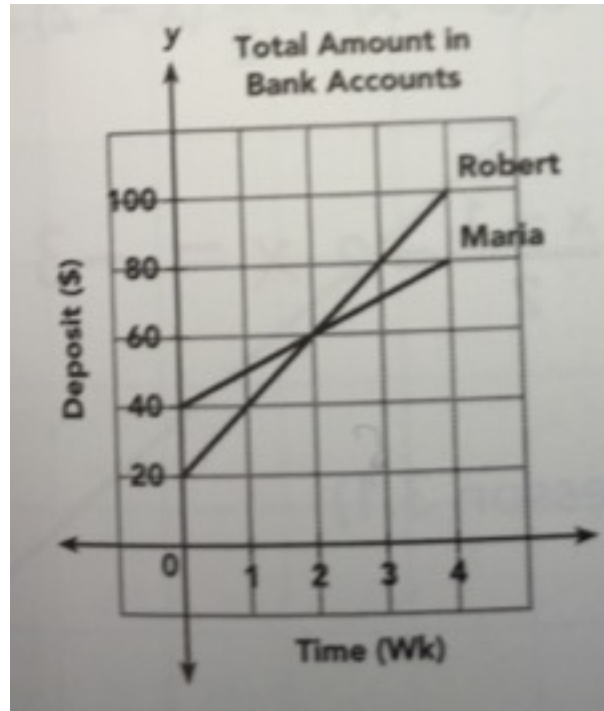9.) Graph a line with slope of -2 that passes through the point (-1, 4) on the coordinate plane below.

10.)Car rental companies A and B each require a deposit of D dollars, to rent a car, plus a fixed mileage charge.

Total Charges for Car Rental Companies A and B

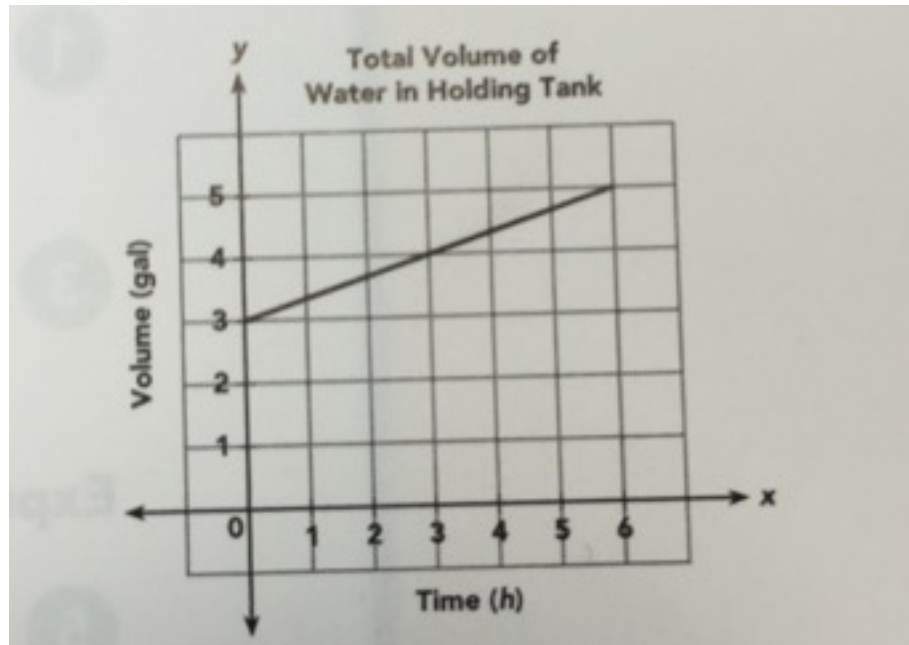a.) Find the amount each car rental company requires for the deposit

b.) Which company charges a greater amount per mile?

11.) Robert and Marie both work as chefs at a restaurant. After receiving their weekly paychecks, they each deposit a fixed amount into their respective bank accounts. the graph shows the amount of money in each of their accounts after one month.
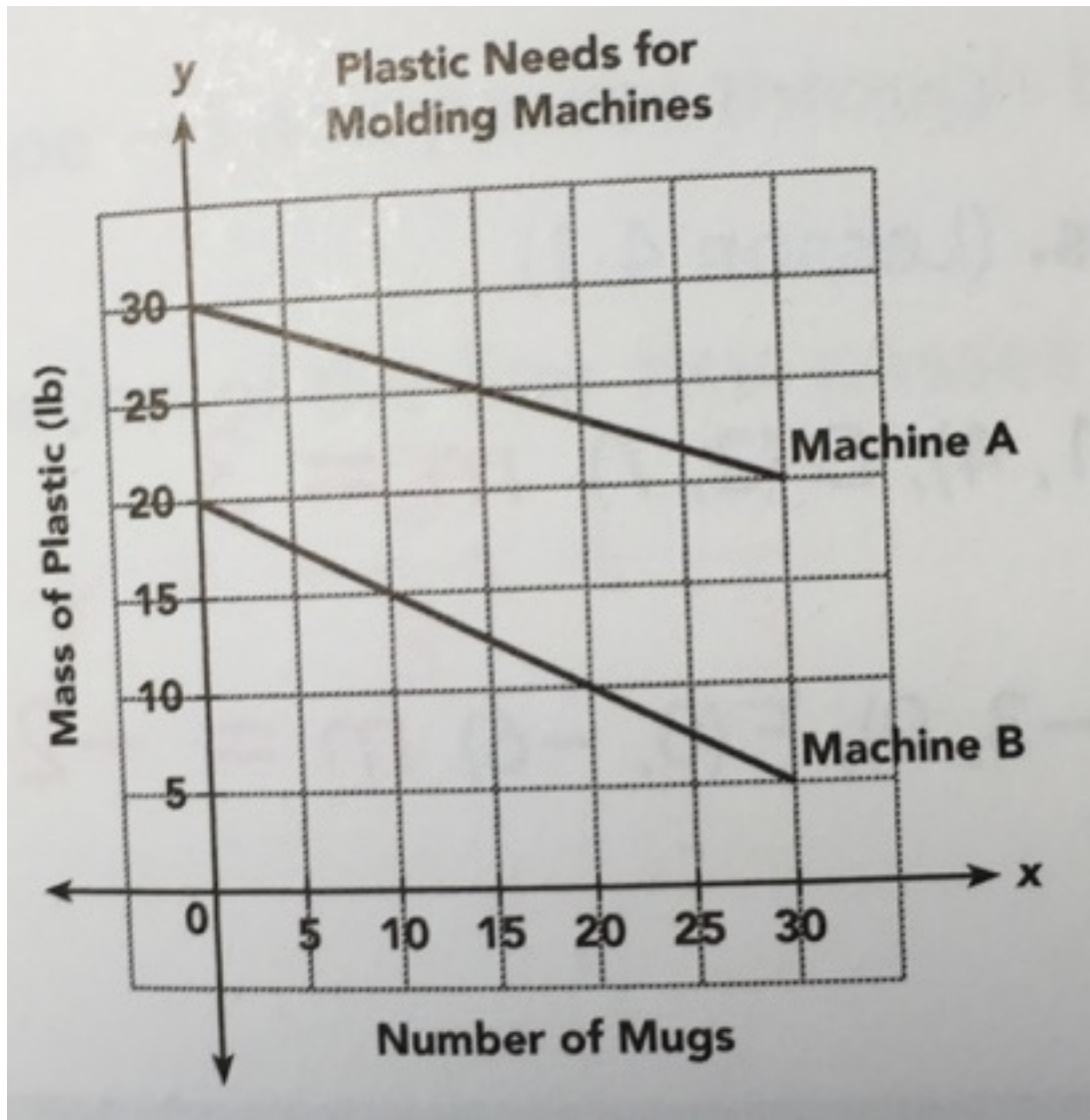

a) Which chef deposits a greater amount of money each week into his/her account? Explain what information you used to determine your answer.

b) In which week do the chefs have the same amount of money in their accounts?

c) Which chef started the month with more money? How can you tell?

12) A holding tank for water is located underneath the leaking inlet valve. The tank initially contained a certain volume of water. The graph shows the total volume of water, y gallons, after x hours.

a) Find the vertical intercept of the graph and explain what information it gives about the situation.

b) Find the slope of the graph and explain what information it gives about the situation.

c) If the maximum capacity of the holding tank is 4 gallons, predict approximately how many hours it will take for the take to overflow.

BONUS : Two molding machines, A and B produce identical plastic mugs at different rates. The graph shows the mass of plastic, y pounds, needed to produce x number of mugs.

Plastic Needs for Molding Machines

Mass of Plastic (lb) — Number of Mugs

a) At start-up, which machine requires a greater amount of plastic?

b) Which machine depletes its plastic more quickly?

c) Which machine uses a lesser amount of plastic per mug explain how you determined your answer.