C5L4 Worksheet

Write an equation of the line in slope-intercept form given the slope of the line and a point on the line.

1. m = -3 (-4, 5)

2. m = 5 (6, -2)

Write an equation of the line in slope-intercept form given two points on the line.

3. (4, 7) (8, 15)

4. (-3, 5) (7, -3)

#5 – 8 all represent linear relationships.

5. A sign says that 5 tickets cost $48.75 and that 13 tickets cost $126.75.

a. Write an equation in point-slope form that represents the cost of the tickets.

b. Write an equation in slope-intercept form that represents the cost of the tickets.

6. A restaurant's goal is to serve 800 customers in 18 hours and 1200 customers in 20 hours.

a. Write an equation in point-slope form that represents the number of customers served per hour.

b. Write an equation in slope-intercept form that represents the number of customers served per hour.

7. At 7:00 A.M., there were 500,000 gallons of water remaining in a reservoir. After 4 hours of irrigation, there were 100,000 gallons of water remaining.

a. Write an equation in point-slope form that represents the number of gallons of water remaining.

b. Write an equation in slope-intercept form that represents the number of gallons of water remaining.

8. In 1980, the population of a certain town was 5700. By 2010, the population had grown to 7200. Let x = 0 represent 1980.

a. Write an equation in point-slope form that represents the population of the town.

b. Write an equation in slope-intercept form that represents the population of the town.