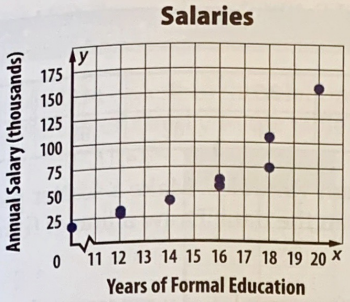
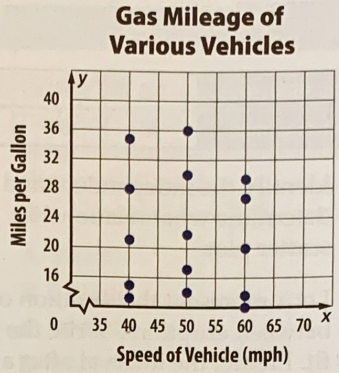
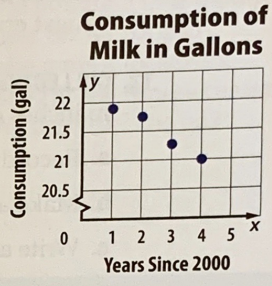
6.



7



Examples 2–3 8. **MILK** Refer to the scatter plot of gallons of milk consumption per person for selected years.



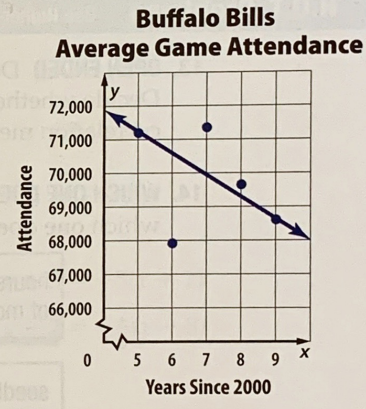
a. Use the points (2, 21.75) and (4, 21) to write the slope-intercept form of an equation for the line of fit.

b. Predict the milk consumption in 2020.

c. Predict in what year milk consumption will be 10 gallons.

d. Is it reasonable to use the equation to estimate the consumption of milk for any year? Explain.

9. **FOOTBALL** Use the scatter plot.



a. Use the points (5, 71,205) and (9, 68,611) to write the slope-intercept form of an equation for the line of fit shown in the scatter plot.

b. Predict the average attendance at a game in 2020.

c. Can you use the equation to make a decision about the average attendance in any given year in the future? Explain.

10. CCSS **SENSE-MAKING** The Body Mass Index (BMI) is a measure of body fat using height and weight. The heights and weights of twelve men with normal BMI are given in the table at the right.

Height (in.)	Weight (lb)
62	115
63	124
65	120
67	134
67	140
68	138
68	144
68	152
69	147
72	155
73	168
73	166

a. Make a scatter plot comparing the height in inches to the weight in pounds.

b. Draw a line of fit for the data.

c. Write the slope-intercept form of an equation for the line of fit.

d. Predict the normal weight for a man who is 84 inches tall.

e. A man's weight is 188 pounds. Use the equation of the line of fit to predict the height of the man.