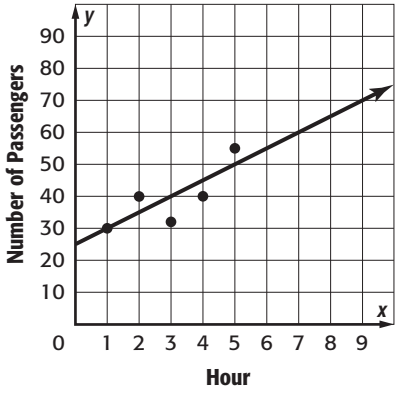
NAME _____ DATE _____ PERIOD _____

Lesson 2 Skills Practice

Lines of Best Fit

1. BOATING Rehan's yacht holds 70 passengers. Each hour he stops at the marina to let some passengers off and on. The table shows how many passengers are on board during each hour of boating.

Hour	1	2	3	4	5
Passengers	30	40	32	40	55

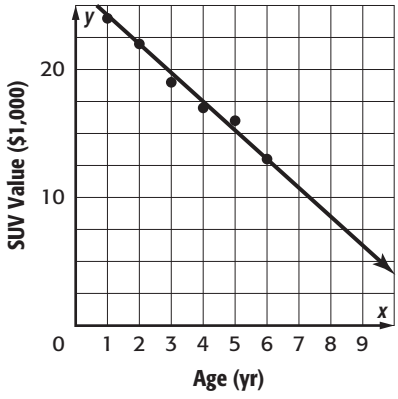


a. Construct a scatter plot of the data. Then draw and assess a line that seems to best represent the data.

b. Use the line of best fit to make a conjecture about the number of passengers on the boat during hour 8. **Sample answer: 65 passengers**

2. RESALE VALUE The table shows the resale value of six SUVs plotted against the age of the vehicle.

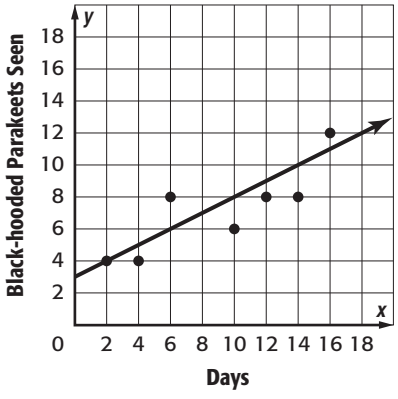
Age (yr)	1	2	3	4	5	6
Value ($1,000)	24	22	19	17	16	13



a. Construct a scatter plot of the data. Then draw and assess a line that seems to best represent the data.

b. Use the line of best fit to estimate the resale value of a 7-year-old SUV.
Sample answer: $11,000

3. BIRD WATCHING Sage belongs to a bird-watching club. Every two days, she goes out and counts the number of Black-hooded Parakeets she sees. The scatter plot shows the number of parakeets she saw in the past 12 days.



a. Write an equation in slope-intercept form for the line that is drawn.
Sample answer: $y = \frac{1}{2}x + 3$

b. Use the equation to make a conjecture about the number of parakeets she saw on the eighteenth day. **12 parakeets**