☆ Guided Practice*

For **1** through **3**, use the table that shows Ben's heart rate, in beats per minute, after different lengths of time exercising.

Minutes of Exercise	Heart Rate (bpm)
0	82
6	103
10	109
15	116
22	132
29	140

3. Explain How can you determine the scale on each axis of the scatterplot?

1. How should Ben label the axes for a scatterplot of the data?

4. Communicate How can a scatterplot help you see a trend in data?

2. What would be a good title for the scatterplot?

Independent Practice ☆

For **5** and **6**, make a scatterplot of the data in each table. Describe the relationship, if there is one, between the two sets of values.

5.

Movie Ticket Sales	Concessions Sales
$150	$45
$375	$110
$300	$90
$450	$125
$275	$100
$200	$75

6.

| Weeks of Training	1-Mile Times (min)
1	10.25
4	9.5
6	8.75
9	8.5
11	8
12	7.5

Problem Solving

7. Represent Make a scatterplot of the data. Describe the relationship, if there is one, between the two sets of values.

Student's Shoe Size	6	10	8	7	11	8	4
Pairs of Shoes Owned	4	3	2	1	5	6	7

8. Represent Make a scatterplot of the data for 8 different snacks. Describe the relationship, if there is one, between the two sets of values.

Number of Fat Grams	17	25	22	18	29	21	23	14
Number of Calories	240	290	300	290	340	275	325	180

9. The scatterplot shows the value of a car after each year it is driven. Describe the relationship between the two sets of values.

A   As the time a car is driven decreases, the value of the car decreases.

B   As the time a car is driven decreases, the value of the car stays the same.

C   As the time a car is driven increases, the value of the car decreases.

D   As the time a car is driven increases, the value of the car increases.
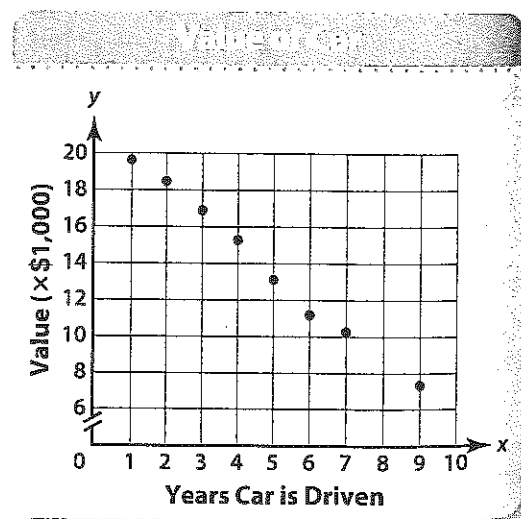
10. Extend Your Thinking Draw a straight line on the scatterplot in Problem 9 that is close to most of the data points. Use this line to predict the value of the car after 10 years.

11. Number Sense There are 29 students learning to speak a foreign language. Of those, 5 students are studying German. There are twice as many students studying Spanish as there are studying French. How many students are studying each language?