Practice 6.3: Interpreting Data Sets   B

Mr. Wilde surveys his students. He asks each student the number of states he or she has visited, and records the results in the following table. Use the table to answer questions 1–3.

Student	States visited	Student	States visited
A	11	K	4
B	10	L	7
C	9	M	2
D	4	N	2
E	1	O	9
F	6	P	3
G	1	Q	3
H	10	R	10
I	18	S	2
J	4	T	5

1. Are there any outliers in the data set? Explain.

2. Mr. Wilde wants to estimate the number of states any given student has visited. How should he calculate his estimation? Why?

3. What is the estimated number of states visited by any given student?

Rosa surveys 12 nearby gyms. She records each gym's monthly membership cost in the following table. Use the table to solve problems 4–7.

Gym	Monthly cost in dollars	Gym	Monthly cost in dollars
1	35	7	25
2	15	8	25
3	15	9	35
4	40	10	65
5	30	11	10
6	20	12	30

4. Create a dot plot showing the cost of nearby gyms.

5. Are there any outliers in the data set? Explain.

6. Rosa wants to estimate the monthly membership cost of nearby gyms. How should she estimate the cost? Calculate the estimated monthly membership cost.
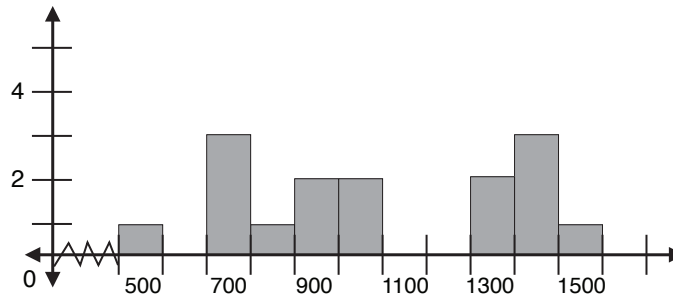
7. Describe the shape and spread of the data.

continued

A game on Jackson's phone keeps track of his scores, in points, in a histogram. The scores are all multiples of 100. The histogram currently on his phone is shown. Use the histogram to answer questions 8–10.

8. Are there any outliers in the data set? Explain.

9. How should Jackson estimate his score per game? Calculate the estimated score.

10. Jackson is playing one more game. With the score of this game, Jackson wants to increase his mean score by 100 points. What is the minimum score Jackson needs to increase his mean by 100 points? Recall that the scores are all multiples of 100.