Chapter Test .... Form A

Chapter 8

Which sample is more likely to be random? Explain.

1. A restaurant owner wants to know what the favorite dishes in his restaurant are.

   a. He asks all the people who order the pasta special.

   b. He asks every fourth customer who leaves the restaurant.

   _____

   _____

   _____

2. You want to survey movie-goers about their favorite types of movies.

   a. You ask several people leaving the movie theater.

   b. You ask several people coming out of a comedy.

   _____

   _____

   _____

3. The following are your scores on science tests.

   86 80 91 86 95 100

   a. Which is the most impressive representation of how well you are doing in class: the mean, the mode, or the median of your scores? Explain.

   _____

   _____

   b. Which is the most accurate? Explain.

   _____

   _____

Is each question *biased* or *fair*? Explain.

4. Would you prefer a vacation in pleasant, sunny Florida or in the barren wasteland of the Arctic?

   _____

5. Would you prefer going to the beach or going to the mountains?

   _____

Chapter Test (continued) .... Form A

Chapter 8

Use a proportion to estimate each population.

6. Total deer counted: 64
Tagged deer counted: 24
Total deer tagged: 46

_____

7. Total birds counted: 146
Tagged birds counted: 48
Total birds tagged: 250

_____

The table shows the number of miles traveled to work each day by a random sample of 16 employees at a company. Use the sample to make an inference about each measure. Support your answer.

Number of Miles Traveled			
22	38	14	28
27	41	49	24
42	31	58	14
58	10	34	38

8. The mean number of miles traveled by all employees at the company

_____

_____

9. The percent of employees who commute less than 40 miles

_____

The data below shows the number of practice hours spent each week of a random sample of viola and violin players.

Viola: 3, 6, 2, 4, 4, 3, 5, 5, 2, 8
Violin: 3, 4, 5, 4, 3, 2, 4, 5, 4, 4

10. Compare the means of each data set, and use the comparison to draw an inference.

_____

11. Determine the MAD of each data set.

_____