

Name \_\_\_\_\_

Period \_\_\_\_\_

## Chapter 1 Review #1

1. You want to know how often residents of cold climates vacation in warm destinations. You randomly sample 50 residents and find out how many annual trips to warm destinations they've taken during their adult lives.

True or False: This is an example of discrete data.

2. Which of these are categorical data?
- A. The birth weights of anteaters
  - B. The lengths of anteaters
  - C. The different types of anteaters
  - D. The top speeds of anteaters
  - E. The prices of anteaters
3. Your class is participating in an Internet game show and must choose whether a prize is behind door #1 or door #2. You take a vote. The numbers for the doors are an example of which kind of data?
- A. Quantitative, discrete
  - B. Quantitative, continuous
  - C. Categorical
  - D. None of the above
4. When your class participates in an Internet game show and counts the votes for door #1 and door #2, the counts are examples of what kind of data?
- A. Quantitative, discrete
  - B. Quantitative, continuous
  - C. Categorical
  - D. None of the above
5. The class midpoint of the interval whose boundaries are 27.5 and 38.5 is:
- A. 33.5
  - B. 34.5
  - C. 33
  - D. 35
  - E. 32.5
6. Which of the following would most likely be graphed as a bar chart rather than a histogram?
- A. The number of blue, red, black, and white cars in a random sample of 500 cars
  - B. The number of students in a mid-size university who own Macintosh or PC computers
  - C. The ethnic distribution for a major city
  - D. The number of people in various management positions at a large electronics store
  - E. All of the above

You're the manager of the packing crew at Meatin' Place meat market, where the slogan is "no customer is an outlier." Being the manager, you spend your time weighing meat packages and creating five-number summaries.

Here are some ground beef package weights, in pounds:

0.75 0.83 0.87 0.89 0.89 0.89 0.92 0.93 0.96 0.96 0.97 0.98  
 0.99 1.06 1.08 1.08 1.15 1.16 1.16 1.19 1.19 1.2 1.21 1.24  
 1.28 1.38 1.41

7. Create a stemplot of the data.

See Graph Key

8. Calculate the mean, median and mode. Do the mean and median values support the shape of the distribution?

Mean = Median, so the distribution should be symmetric.

9. Calculate the five number summary and draw a boxplot.

.75 .92 1.06 1.19 1.41 See Graph Key for boxplot.

10. In the package weight data you know that an outlier would have a weight:

- A. below 1 pound.
- B. between the minimum weight and the weight at the lower quartile (Q1).
- C. above 1.2 pounds.
- D. below the lower quartile weight.
- E. None of the above

11. The paper "Lessons from Pacemaker Implantations" gave the results of a study that followed 89 heart patients who had received electronic pacemakers. The time (in months) to the first electrical malfunction of the pacemaker was recorded.

24 20 16 32 14 22 2 12 24 6 10 20 8 16 12  
 24 14 20 18 14 16 18 20 22 24 26 28 18 14 10  
 12 24 6 12 18 16 34 18 20 22 24 26 18 2 18  
 12 12 8 24 10 14 16 22 24 22 20 24 28 20 22  
 26 20 6 14 16 18 24 18 16 6 16 10 14 18 24  
 22 28 24 30 34 26 24 22 28 30 22 24 22 32

a) Create a frequency table and relative frequency histogram.

See Graph Key

b) Create an ogive and estimate a value for the median.

See Graph Key

12. Create a data set with seven values where the following is true:

- Mean: 6
- Median: 5
- Mode: 5      4 4 5 5 8 9 10
- Range: 9

Also do the following from your textbook:

1.57 - omit part c) Check Solutions for Chapter 1