

Chapter 12 Practice Quiz

1. The two sets of values commonly used to describe center AND spread are:

- a. Five-number summary AND median
- b. Mean and standard deviation AND median and mode
- c. Mean and standard deviation AND five-number summary
- d. Mean and median AND mode

2. The five-number summary consists of which of the following?

I. Mean II. Median III. Mode IV: Minimum value

V: Maximum value VI: 1st quartile VII: 3rd quartile

VIII: Standard deviation IX: Range

- a. I, II, III, IV, V
- b. I, III, VIII, IX
- c. II, IV, V, VI, VII
- d. I, IV, V, VI, VIII
- e. I, IV, V, VIII, IX

3. A graph of the five-number summary of a data set is a:

- a. Histogram
- b. Stem and leaf
- c. Dot plot
- d. Boxplot

4. Standard deviation is:

- a. The average distance of observations from the mean
- b. The average distance of observations from the median
- c. The square of distances of each observation from the mean
- d. The sum of the observations divided by the number of observations
- e. None of the choices are correct.

5. A survey was given to a group of 12 seniors in high school about how much money they spent last weekend. The results are below:

\$45 \$30 \$15 \$105 \$35 \$50 \$15 \$40 \$45 \$75 \$60 \$50

The median of the data set is:

- a. \$32.50
- b. \$45
- c. \$50
- d. \$47.50
- e. None of the choices are correct.

6. A survey was given to a group of 12 seniors in high school about how much money they spent last weekend. The results are below:

\$45 \$30 \$15 \$105 \$35 \$50 \$15 \$40 \$45 \$75 \$60 \$50

The 1st quartile of the data set is

- a. \$67.50
- b. \$15

- c. \$35
- d. \$32.50

7. A survey was given to a group of 12 seniors in high school about how much money they spent last weekend. The results are below:

\$45 \$30 \$15 \$105 \$35 \$50 \$15 \$40 \$45 \$75 \$60 \$50

The mean of the data set is:

a. $\bar{x} = \frac{565}{11} \approx 51.4$

b. $\bar{x} = \frac{565}{12} \approx 47.1$

- c. \bar{x} is the middle number which is 45.
- d. None of the choices are correct.

8. A survey was given to a group of 12 seniors in high school about how much money they spent last weekend. The results are below:

\$45 \$30 \$15 \$105 \$35 \$50 \$15 \$40 \$45 \$75 \$60 \$50

The standard deviation of this data set

- a. $\approx \$25$
- b. $\approx \$23.9$
- c. $\approx \$47.1$
- d. None of the choices are correct.

9. When a standard deviation of a data set is 0, then:

- a. All observations have the same value
- b. There is no spread at all
- c. The mean is 0
- d. All observations have the same value and there is no spread at all.
- e. None of the choices are correct.

10. The measure of central tendency that is most influenced by extreme observations is:

- a. Mean
- b. Median
- c. Mode
- d. Standard deviation