

King Fahd University of Petroleum & Minerals
Department of Mathematics & Statistics
STAT-211-Term111
Quiz #1

Name:

ID:

Serial:

Q1: The manager of the customer service division of a major consumer electronics company is interested in determining whether the customers who have purchased a videocassette recorder made by the company over the past 12 months are satisfied with their products.

1. The population of interest is
 - a) all the customers who have bought a videocassette recorder made by the company over the past 12 months.
 - b) all the customers who have bought a videocassette recorder made by the company and brought it in for repair over the past 12 months.
 - c) all the customers who have used a videocassette recorder over the past 12 months.
 - d) all the customers who have ever bought a videocassette recorder made by the company.

2. The possible responses to the question "Are you happy, indifferent, or unhappy with the performance per dollar spent on the videocassette recorder?" are values from a
 - a) discrete numerical random variable.
 - b) continuous numerical random variable.
 - c) categorical random variable.
 - d) parameter.

3. The possible responses to the question "How much time do you use the videocassette recorder every week on the average?" are values from a
 - a) discrete numerical random variable.
 - b) continuous numerical random variable.
 - c) categorical random variable.
 - d) parameter.

4. The possible responses to the question "What brand of videocassette recorder did you purchase?" are values from a
 - a) discrete numerical random variable.
 - b) continuous numerical random variable.
 - c) categorical random variable.
 - d) parameter.

5. The possible responses to the question "Out of a 100 point score with 100 being the highest and 0 being the lowest, what is your satisfaction level on the videocassette recorder that you purchased?" are values from a
 - a) discrete numerical random variable.
 - b) continuous numerical random variable.
 - c) categorical random variable.
 - d) parameter.

6. The possible responses to the question "How many videocassette recorders made by other manufacturers have you used?" result in
 - a) a nominal scale variable.
 - b) an ordinal scale variable.
 - c) an interval scale variable.
 - d) a ratio scale variable.

7. The possible responses to the question "Are you happy, indifferent, or unhappy with the performance per dollar spent on the videocassette recorder?" result in
 - a) a nominal scale variable.
 - b) an ordinal scale variable.
 - c) an interval scale variable.
 - d) a ratio scale variable.

8. The possible responses to the question "How much time do you use the videocassette recorder every week on the average?" result in
 - a) a nominal scale variable.
 - b) an ordinal scale variable.
 - c) an interval scale variable.
 - d) a ratio scale variable.

9. The possible responses to the question "How many people are there in your household?" result in
 - a) a nominal scale variable.
 - b) an ordinal scale variable.
 - c) an interval scale variable.
 - d) a ratio scale variable.

10. The possible responses to the question "How would you rate the quality of your purchase experience with 1 = excellent, 2 = good, 3 = decent, 4 = poor, 5 = terrible?" result in
 - a) a nominal scale variable.
 - b) an ordinal scale variable.
 - c) an interval scale variable.
 - d) a ratio scale variable.

Q2: A manufacturer of children toys claims that less than 5% of his products are defective. When 500 toys were drawn from a large production run, 8% were found to be defective.

- a. What is the population of interest?

- b. What is the sample?

- c. What is the parameter?

- d. What is the statistic?

- e. Does the value 5% refer to the parameter or the statistic? Why?