

Student name: _____

The general process of gathering, organizing, summarizing, analyzing, and interpreting data is called:

Statistics.

Descriptive statistics.

Inferential statistics.

Levels of measurement.

The general process of analyzing, and interpreting data to assist in making more effective decisions is called:

Statistics.

Descriptive statistics.

Inferential statistics.

Levels of measurement.

The general process of gathering, organizing, presenting, analyzing, and interpreting data to assist in making more effective decisions is called:

Statistics.

Descriptive statistics.

Inferential statistics.

Levels of measurement.

The general process of organizing, summarizing, and presenting data in an informative way is called:

Statistics.

Descriptive statistics.

Inferential statistics.

Levels of measurement.

(i) The general process of gathering, organizing, presenting, analyzing, and interpreting data to assist in making more effective decisions is called:

(ii) The general process of analyzing, and interpreting data to assist in making more effective decisions is called:

(iii) The entire set of individuals or objects of interest or the measurements obtained from all individuals or objects of interest is called:

(i) statistics, (ii) descriptive statistics, and (iii) a population.

(i) descriptive statistics, (ii) inferential statistics, and (iii) a sample.

(i) inferential statistics, (ii) descriptive statistics, and (iii) a population.

(i) statistics, (ii) descriptive statistics, and (iii) a sample.

(i) statistics, (ii) inferential statistics, and (iii) a population.

(i) The general process of gathering, organizing, presenting, analyzing, and interpreting data to assist in making more effective decisions is called:

(ii) The general process of analyzing, and interpreting data to assist in making more effective decisions is called:

(iii) The subset of individuals or objects of interest or the measurements obtained from all individuals or objects of interest is called:

(i) statistics, (ii) descriptive statistics, and (iii) a population.

(i) descriptive statistics, (ii) inferential statistics, and (iii) a sample.

(i) inferential statistics, (ii) descriptive statistics, and (iii) a population.

(i) statistics, (ii) inferential statistics, and (iii) a sample.

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(i) The general process of gathering, organizing, presenting, analyzing, and interpreting data to assist in making more effective decisions is called:

(ii) The general process of analyzing, and interpreting data to assist in making more effective decisions is called:

(iii) If we test a small number of light bulbs from a large group, the small group is called a:

(i) statistics, (ii) descriptive statistics, and (iii) a population.

(i) descriptive statistics, (ii) inferential statistics, and (iii) a sample.

(i) inferential statistics, (ii) descriptive statistics, and (iii) a population.

(i) statistics, (ii) inferential statistics, and (iii) a sample.

(i) statistics, (ii) inferential statistics, and (iii) a population.

(i) There are two types of variables-quantitative and qualitative.

(ii) A Qualitative variable is nonnumeric and we are usually interested in the number or percent of the observations from each category.

(iii) Qualitative variables can be further divided into discrete and continuous variables.

(i), (ii) and (iii) are all correct statements.

(i) and, (ii) are correct statements but not (iii).

(i) and, (iii) are correct statements but not (ii).

(ii) and, (iii) are correct statements but not (i).

The main purpose of descriptive statistics is to:

Summarize data in a useful and informative manner.

Make inferences about a population.

Determine if the data adequately represents the population.

Gather or collect data.

When TV advertisements report that "2 out of 3 dentists surveyed indicated they would recommend Brand X toothpaste to their patients," an informed consumer may question the conclusion because:

The results were incorrectly computed.

Dentists were not really surveyed.

The conclusion does not include the total number of dentists surveyed.

The conclusion is not illustrated with a graph.

What is a portion or part of a population called?

Random sample

Sample

Tally

Frequency distribution

A marketing class of 50 students evaluated the instructor using the following scale: superior, good, average, poor, and inferior. The descriptive summary showed the following survey results: 2% superior, 8% good, 45% average, 45% poor, and 0% inferior.

The instructor's performance was great!!!

The instructor's performance was inferior.

Most students rated the instructor as poor or average.

No conclusions can be made.

Which word is NOT part of the definition of descriptive statistics?

Organizing

Analyzing

Presenting

Predicting

A marketing class of 50 students evaluated the instructor using the following scale: superior, good, average, poor, and inferior. The descriptive summary showed the following survey results: 42% superior, 28% good, 25% average, 5% poor, and 0% inferior.

The instructor's performance was great!!!

The instructor's performance was inferior.

Most students rated the instructor as poor or average.

No conclusions can be made.

Colleen Waite, Director of General Canadian Sales, is concerned by a downward sales trend. Specifically, their customer base is stable at 2,200, but they are purchasing less each year. She orders her staff to search for causes of the downward trend by selecting a focus group of 50 customers.

The focus group of 50 customers represents a sample.

The focus group of 50 customers represents a population.

The focus group of 50 customers represents an inferential statistic.

The focus group of 50 customers represents a census.

Colleen Waite, Director of General Canadian Sales, is concerned by a downward sales trend. Specifically, their customer base is stable at 2,200, but they are purchasing less each year. She orders her staff to search for causes of the downward trend by selecting a focus group of 50 customers.

The 2,200 customers represent a sample.

The 2,200 customers represent a population.

The 2,200 customers represent an inferential statistic.

The 2,200 customers represent a census.

What type of data is the number of litres of gasoline pumped by a filling station during a day?

Qualitative

Continuous

Attribute

Discrete

What type of data is the projected return on an investment?

Qualitative

Continuous

Attribute

Discrete

(i) There are two types of variables-quantitative and qualitative.

(ii) A Qualitative variable is nonnumeric and we are usually interested in the number or percent of the observations from each category.

(iii) Quantitative variables can be further divided into discrete and continuous variables.

(i), (ii) and (iii) are all correct statements.

(i) and, (ii) are correct statements but not (iii).

(i) and, (iii) are correct statements but not (ii).

(ii) and, (iii) are correct statements but not (i).

Only statement (ii) is true.

What type of data is the number of robberies reported in your city?

Attribute

Continuous

Discrete

Qualitative

A survey reports consumers' preferred brands of dish soap. What type of data is this called?

Quantitative

Continuous

Discrete

Qualitative

Which of the following is an example of attribute data?

Number of children in a family

Weight of a person

Colour of ink in a pen

Miles between oil changes

A survey reports consumers' preferred hair colour. What type of data is this called?

Attribute or Qualitative

Continuous

Discrete

Quantitative

(i) There are two types of variables-quantitative and qualitative.

(ii) A Qualitative variable is nonnumeric and we are usually interested in the number or percent of the observations from each category.

(iii) Quantitative variables can be further divided into discrete and continuous variables.

(i), (ii) and (iii) are all correct statements.

(i) and, (ii) are correct statements but not (iii).

(i) and, (iii) are correct statements but not (ii).

(ii) and, (iii) are correct statements but not (i).

Your height and weight are examples of which type of random variable?

Discrete

Continuous

Mutually exclusive

Qualitative

What type of data is the amount of income tax that you have paid?

Mutually exhaustive

Continuous

Discrete

Qualitative

A market researcher is interested in determining the average income for families in York Region, Ontario. To accomplish this, he takes a random sample of 200 families from the region and uses the data gathered to estimate the average income for families of the entire region. This process is an example of:

descriptive statistics

inferential statistics

mutually exclusive statistics

qualitative

parametric methods

Which one of the following statistics is NOT an example of discrete data?

Number of households watching Canadian Idol.

Number of employees reporting in sick.

Distance traveled between Toronto and Ottawa.

Number of members of the York Region Lions Club.

Number of family members.

Which of the following is an example of continuous data?

Family income

Number of students in a statistics class

Postal codes of shoppers

Rankings of baseball teams in a league

The incomes of a group of 50 loan applicants are obtained. Which level of measurement is income?

Nominal

Ordinal

Interval

Ratio

A bank asks customers to evaluate the drive-thru service as to good, average, or poor. Which level of measurement is this classification?

Nominal

Ordinal

Interval

Ratio

If Gallup, Harris and other pollsters asked people to indicate their political party affiliation- Liberal, Conservative or NDP, the data gathered would be an example of which scale of measurement?

Nominal

Ordinal

Interval

Ratio

The members of each basketball team wear numbers on the back of their jerseys. What scale of measurement are these numbers considered?

Nominal

Ordinal

Interval

Ratio

A questionnaire contained a question regarding marital status. The respondent checked single, married, divorced, separated or widowed. What is the scale of measurement for this question?

Ratio

Interval

Ordinal

Nominal

Respondents were asked, "Do you now earn more than or less than you did five years ago?" What is this level of measurement?

Interval

Ratio

Nominal

Ordinal

If unemployment is 5.5% of the population, what is this level of measurement?

Nominal

Ordinal

Interval or ratio

Descriptive

The Equal Employment Opportunity Act requires employers to classify their employees by gender and national origin. Which level of measurement is this?

Nominal

Ordinal

Interval

Ratio

What level of measurement are the Centigrade and Fahrenheit temperature scales?

Nominal

Ordinal

Interval

Ratio

What level of measurement is the number of auto accidents reported in a given month?

Nominal

Ordinal

Interval

Ratio

The names of the positions on a hockey team, such as forward and defence, are examples of what level of measurement?

Nominal

Ordinal

Interval

Ratio

What level of measurement is the price of an admission ticket to a movie theater?

Nominal

Ordinal

Interval

Ratio

The final rankings of the top 20 NCAA college basketball teams are an example of which level of measurement?

Nominal

Ordinal

Interval

Ratio

Your height and weight are examples of which level of measurement?

Nominal

Ordinal

Interval

Ratio

Shoe sizes, such as 7B, 10D and 12EEE, are examples of what level of measurement?

Nominal

Ordinal

Interval

Ratio

The Nielsen Ratings break down the number of people watching a particular television show by age. Age is what level of measurement?

Nominal

Ordinal

Interval

Ratio

What level of measurement is a bar code?

Ratio

Ordinal

Interval

Nominal

A group of women tried five brands of hair spray and ranked them according to preference. What level of measurement is this?

Nominal

Ordinal

Interval

Ratio

Which of the following three statements are true?

(i) Statistics is defined as a body of techniques used to facilitate the collection, organization, presentation, analysis and interpretation of information for the purpose of making better decisions.

(ii) The order that runners finish in a race would be an example of continuous data.

(iii) The principal difference between the interval and ratio scale is that the ratio scale has a meaningful zero point.

(i), (ii) and (iii) are all correct statements.

(i) and, (ii) are correct statements but not (iii).

(i) and, (iii) are correct statements but not (ii).

(ii) and, (iii) are correct statements but not (i).

(i) If we select 100 persons out of 25,000 registered voters and question them about candidates and issues, the 100 persons are referred to as the population.

(ii) The order that runners finish in a race would be an example of continuous data.

(iii) Qualitative data are usually summarized in graphs and bar charts.

(i), (ii) and (iii) are all correct statements.

(i) and, (ii) are correct statements but not (iii).

(i) and, (iii) are correct statements but not (ii).

(iii) only is correct.

A company was studying the demographics of their customers. As part of the study they collected the following variables: gender, marital status, credit rating (low, medium, high), annual income, and age.

Label the variable gender as qualitative or quantitative, discrete or continuous, and nominal, ordinal, interval, or ratio.

qualitative, discrete, nominal

qualitative, continuous, ordinal

quantitative, discrete, nominal

quantitative, continuous, ratio

Label the variable marital status as qualitative or quantitative, discrete or continuous, and nominal, ordinal, interval, or ratio.

qualitative, discrete, nominal

qualitative, continuous, ordinal

quantitative, discrete, nominal

quantitative, continuous, ratio

Label the variable credit rating as qualitative or quantitative, discrete or continuous, and nominal, ordinal, interval, or ratio.

qualitative, continuous, nominal

qualitative, discrete, ordinal

quantitative, discrete, nominal

quantitative, continuous, ratio

Label the variable annual income as qualitative or quantitative, discrete or continuous, and nominal, ordinal, interval, or ratio.

qualitative, discrete, nominal

qualitative, continuous, ordinal

quantitative, discrete, nominal

quantitative, continuous, ratio

Label the variable age as qualitative or quantitative, discrete or continuous, and nominal, ordinal, interval, or ratio.

qualitative, discrete, nominal

qualitative, continuous, Ordinal

quantitative, discrete, nominal

quantitative, continuous, ratio

Which two variables are considered to be continuous rather than discrete?

gender and marital status

age and credit rating

gender and annual income

annual income and age

Which two variables are considered to be quantitative rather than qualitative?

gender and marital status

age and credit rating

gender and annual income

annual income and age

Which three variables are considered to be qualitative rather than quantitative?

gender, age and marital status

annual income, age and credit rating

credit rating, gender, and marital status

gender, annual income, and age

The collecting, organizing, presenting, analyzing, and interpreting of data is called:

discrete information

sample information

descriptive information

statistics

The branch of statistics which does not involve generalizations is called:

discrete statistics

sample statistics

descriptive statistics

inferential statistics

When we make an estimate or prediction, we use _____ techniques.

discrete

sample

descriptive

inferential

The branch of statistics from which we draw conclusions from sample data is called _____ statistics.

discrete

sample

descriptive

inferential

If we test a small number of light bulbs from a large group, the small group is called a:

discrete

sample

descriptive

population

The branch of statistics in which data is collected, analyzed and presented in a concise format is called _____ statistics.

discrete

sample

descriptive

inferential

Among the many classes held at your college or university, your statistics class has been selected for a study. This one class is referred to as a:

discrete

sample

census

population

The collection of all possible objects of interest is referred to as the:

discrete

sample

census

population

The total group being studied is called the:

discrete

sample

census

population

The number of workers reporting sick in any particular week is considered to be _____ data.

discrete

continuous

census

population

A variable that can have any value within a specific range is called:

discrete

continuous

census

population

Ranked data is an example of a(n) _____ level of measurement.

nominal

ordinal

interval

ratio

The prime rate of interest is an example of a(n) _____ level of measurement.

nominal

ordinal

interval

ratio

The "lowest" level of measurement is:

nominal

ordinal

interval

ratio

The "highest" level of measurement is:

nominal

ordinal

interval

ratio

Categorizing students as freshmen, sophomores, juniors and seniors is an example of the _____ level of measurement.

nominal

ordinal

interval

ratio

The lowest level of measurement that has some sort of ranking is:

nominal

ordinal

interval

ratio

PlayTime Toys Inc. employs 50 people in the Assembly Department. Forty of the employees belong to a union and 10 do not. Five employees are selected at random to form a committee to meet with management regarding shift starting times.

Would the 50 employees be considered a population or a sample?

population

sample

Would the 5 selected employees be considered a population or a sample?

population

sample

The Shell station on Portage Ave in Winnipeg is studying the number of litres of fuel that are sold on each day of the week. Records are available for the past year.

How can the variable 'number of litres' be best described?

Discrete

Quantitative

Qualitative

Census

Nominal

How can the variable 'number of litres' be best described?

Discrete

Continuous

Qualitative

Census

Nominal

Is the variable 'number of litres' discrete or continuous?

Discrete

Continuous

Environment Yukon tracks the changes in temperature in glaciers. Which answer best describes this variable?

Qualitative Nominal

Qualitative Ordinal

Quantitative Interval

Quantitative Ratio

Environment Yukon tracks the changes in temperature in glaciers. Which answer best describes this variable?

discrete

continuous

nominal

ordinal

A radio station conducts a survey to determine listener's favorite program. The choices are: Talk radio, Sports Radio, Adult soft, Adult pop. Which answer best describes this variable?

quantitative

continuous

nominal

ordinal

Determine which answer best describes the new minimum wage amount of \$16.00.

Discrete ratio

Continuous ratio

Discrete interval

Continuous interval

The number of cars parked at the hospital parking lot is?

Nominal

Ordinal

Interval

Ratio

A student receives the following grades: B+, C+, A, B+ and A+. What type of data has been collected?

Nominal

Ordinal

Interval

Ratio

What type of variable is the number of cars parked at the hospital parking lot?

Qualitative discrete

Qualitative continuous

Quantitative discrete

Quantitative continuous

A telephone company asks you how many phones you have on your family plan. Which level of measurement is this classification?

Nominal

Ordinal

Interval

Ratio

Today's weather report indicates an 80% chance of precipitation. Which level of measurement is this classification?

Nominal

Ordinal

Interval

Ratio

Today's weather report indicates a high of 28 degrees. Which level of measurement is this classification?

Nominal

Ordinal

Interval

Ratio

(i) Comparing temperatures from one period to another is looking at continuous ratio level data.
(ii) Comparing temperatures from one period to another is looking at continuous, interval level data.

(iii) Comparing temperatures from one period to another is interval level data because a temperature still exists when the temperature is zero degrees.

(i), (ii) and (iii) are all correct statements.

(i) and (ii) are correct statements but not (iii).

(i) and (iii) are correct statements but not (ii).

(ii) and (iii) are correct statements but not (i).

Answer Key

Test name: Ch1_Basic Statistics for Business and Economics_7ce

A

C

A

B

E

D

D

B

A

C

B

C

D

A

A

B

B

B

A

C

D

C

A

A
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D
B
C

D

Section Break

A

A

B

D

D

D

D

C

D

C

D

D

B

C

B

D

D

A

B

B

D

A

D

B

B

Section Break

A

B

Section Break

B

B

B

C

B

C

B

D

B

C

D

D

C

C