File: ch01, Chapter 1: Introduction to Statistics

True/False

1. Virtually all areas of business use statistics in decision making.
Ans: True
Response: See section 1.1, ~~Statistics in Business~~Basic Statistical Concepts
Difficulty: Easy
Learning Objective: 1.1: List quantitative and graphical examples of statistics within a business context.

2. Statistics can be used to predict ~~the~~ business in the future.
Ans: True
Response: See section 1.1, Basic Statistical Concepts~~Statistics in Business~~
Difficulty: Easy
Learning Objective: 1.1: List quantitative and graphical examples of statistics within a business context.

3. Statistics are used to market vitamins.
Ans: True
Response: See section 1.1, Basic Statistical Concepts~~Statistics in Business~~
Difficulty: Easy
Learning Objective: 1.1: List quantitative and graphical examples of statistics within a business context.

4. A list of final grades in an introductory class in business is an example of statistics
Ans: False
Response: See section 1.1, Basic Statistical Concepts~~Statistics in Business~~
Difficulty: Easy
Learning Objective: 1.1: List quantitative and graphical examples of statistics within a business context.

5. A graph of purchases made from one store location would be an example of statistics within a business context.
Ans: True
Response: See section 1.1: Basic Statistical Concepts
Difficulty: Easy
Leaning Objective: 1.1: List quantitative and graphical examples of statistics within a business context.

~~5~~6. The complete collection of all entities under study is called the sample.
Ans: False
Response: See section 1.2, ~~Basic Statistical Concepts~~Data Measurement
Difficulty: Easy
Learning Objective: 1.2: ~~define~~ Define important statistical terms, including population, sample, and parameter, as they relate to descriptive and inferential statistics.

~~6~~6. A portion or subset of the entities under study is called the statistic.
Ans: False
Response: See section 1.2, Data Measurement~~Basic Statistical Concepts~~
Difficulty: Easy
Learning Objective: 1.2: ~~define~~ Define important statistical terms, including population, sample, and parameter, as they relate to descriptive and inferential statistics.

~~7~~8. A descriptive measure of the population is called a parameter.
Ans: True
Response: See section 1.2, Data Measurement~~Basic Statistical Concepts~~
Difficulty: Easy
Learning Objective: 1.2: ~~define~~ Define important statistical terms, including population, sample, and parameter, as they relate to descriptive and inferential statistics.

~~8~~9. A census is the process of gathering data on all the entities in the population.
Ans: True
Response: See section 1.2, Basic Statistical Concepts
Difficulty: Easy
Learning Objective: 1.2: ~~define~~ Define important statistical terms, including population, sample, and parameter, as they relate to descriptive and inferential statistics.

~~9~~10. Statistics is commonly divided into two branches called descriptive statistics and summary statistics.
Ans: False
Response: See section 1.2, Basic Statistical Concepts
Difficulty: Easy
Learning Objective: 1.2: ~~define~~ Define important statistical terms, including population, sample, and parameter, as they relate to descriptive and inferential statistics.

~~10~~11. A descriptive measure of the sample is called a statistic.
Ans: True
Response: See section 1.2, Data Measurement~~Basic Statistical Concepts~~
Difficulty: Easy
Learning Objective: 1.2: ~~define~~ Define important statistical terms, including population, sample, and parameter, as they relate to descriptive and inferential statistics.

~~11~~12. Gathering data from a sample to reach conclusions about the population from which the sample was drawn is called descriptive statistics.
Ans: False
Response: See section 1.2, Data Measurement~~Basic Statistical Concepts~~
Difficulty: Medium
Learning Objective: 1.2: ~~define~~ Define important statistical terms, including population, sample, and parameter, as they relate to descriptive and inferential statistics.

~~12~~13. Calculation of population parameters is usually either impossible or excessively time consuming and costly.
Ans: True
Response: See section 1.2, Data Measurement~~Basic Statistical Concepts~~
Difficulty: Easy
Learning Objective: 1.2: ~~define~~ Define important statistical terms, including population, sample, and parameter, as they relate to descriptive and inferential statistics.

~~13~~14. The basis for inferential statistics is the ability to make decisions about population parameters without having to complete a census of the population.
Ans: True
Response: See section 1.2, Data Measurement~~Basic Statistical Concepts~~
Difficulty: Easy
Learning Objective: 1.2: ~~define~~ Define important statistical terms, including population, sample, and parameter, as they relate to descriptive and inferential statistics.

~~14~~15. A variable is a numerical description of each of the possible outcomes of an experiment.
Ans: True
Response: See section 1.3 ~~Variable and data~~Introduction to Business Analytics
Difficulty: Medium
Learning Objective: 1.3: Explain the difference between variables, measurement, and data.

~~15~~16. Variables and measurement data are interchangeable terms.
Ans: False
Response: See section 1.3 Introduction to Business Analytics~~Variable and data~~
Difficulty: Medium
Learning Objective: 1.3: Explain the difference between variables, measurement, and data.

~~16~~17. Measurements occur when a standard process is used to assign numbers to attributes or characteristics of a variable.
Ans: True
Response: See section 1.3 Introduction to Business Analytics~~Variable and data~~
Difficulty: Medium
Learning Objective: 1.3: Explain the difference between variables, measurement, and data.

18. One piece of data includes a variety of variables.
Ans: False
Response: See section 1.3 Introduction to Business Analytics
Difficulty: Medium
Learning Objective: 1.3: Explain the difference between variables, measurement, and data.

19. A variable can take on different values.

Ans: True
Response: See section 1.1 Basic Statistical Concepts
Difficulty: Easy
Learning Objective: 1.3 : Explain the difference between variables, measurement, and data.

1720.All numerical data must be analyzed statistically in the same way because all of them are represented by numbers.
Ans: False
Response: See section 1.41.2, Data Measurement
Difficulty: Medium
Learning Objective: 1.4: Compare the four different levels of data: nominal, ordinal, interval, and ratio.

1821.The manner in which numerical data can be analyzed statistically depends on the level of data measurement represented by numbers being analyzed.
Ans: True
Response: See section 1.41.2, Data Measurement
Difficulty: Medium
Learning Objective: 1.4: Compare the four different levels of data: nominal, ordinal, interval, and ratio.

1922.The lowest level of data measurement is the ratio level.
Ans: False
Response: See section 1.41.2, Data Measurement
Difficulty: Easy
Learning Objective: 1.4: Compare the four different levels of data: nominal, ordinal, interval, and ratio.

2023.The highest level of data measurement is the ratio level.
Ans: True
Response: See section 1.41.2, Data Measurement
Difficulty: Easy
Learning Objective: 1.4: Compare the four different levels of data: nominal, ordinal, interval, and ratio.

2124.Numbers which are used only to classify or categorize the observations represent data measured at the nominal level.
Ans: True
Response: See section 1.41.2, Data Measurement
Difficulty: Medium
Learning Objective: 1.4: Compare the four different levels of data: nominal, ordinal, interval, and ratio.

2225.Numbers which are used to rank-order the performance of workers represent data measured at the interval level.
Ans: False
Response: See section 1.41.2, Data Measurement

Difficulty: Medium
Learning Objective: 1.4: Compare the four different levels of data: nominal, ordinal, interval, and ratio.

2326.Nominal and ordinal data are sometimes referred to as qualitative data.
Ans: True
Response: See section 1.41.2, Data Measurement
Difficulty: Easy
Learning Objective: 1.4: Compare the four different levels of data: nominal, ordinal, interval, and ratio.

2427.Nominal and ordinal data are sometimes referred to as quantitative data.
Ans: False
Response: See section 1.41.2, Data Measurement
Difficulty: Easy
Learning Objective: 1.4: Compare the four different levels of data: nominal, ordinal, interval, and ratio.

2528.With interval level data, the zero point is a matter of convention and does not mean the absence of the phenomenon under observation.
Ans: True
Response: See section 1.41.2, Data Measurement
Difficulty: Medium
Learning Objective: 1.4: Compare the four different levels of data: nominal, ordinal, interval, and ratio.

2629.Interval and Ratio level data are sometimes referred to as quantitative data.
Ans: True
Response: See section 1.41.2, Data Measurement
Difficulty: Easy
Learning Objective: 1.4: Compare the four different levels of data: nominal, ordinal, interval, and ratio.

30. Big data refers to a standard set of variables collected from customers, suppliers, and staff.
Ans: False
Response: See section 1.3: Introduction to Business Analytics
Difficulty: Easy
Learning Objective: 1.5: Define important business analytics terms including big data, business analytics, data mining, and data visualization.

31. One goal of data visualization is to make complex data easier to understand.
Ans: True
Response: See section 1.3: Introduction to Business Analytics
Difficulty: Easy

Learning Objective: 1.5: Define important business analytics terms including big data, business analytics, data mining, and data visualization.

32. The main objective of business analytics is to transform data into meaningful information for business managers.
Ans: True
Response: See section 1.3: Introduction to Business Analytics
Difficulty: Easy
Learning Objective: 1.5: Define important business analytics terms including big data, business analytics, data mining, and data visualization.

33. Extracting and transforming data are two steps in data visualization.
Ans: False
Response: See section 1.3: Introduction to Business Analytics
Difficulty: Easy
Learning Objective: 1.5: Define important business analytics terms including big data, business analytics, data mining, and data visualization.

34. If a manager relies on his/her gut instinct to make critical business decisions, this is an example of business analytics in action.
Ans: False
Response: See section 1.3: Introduction to Business Analytics
Difficulty: Easy
Learning Objective: 1.5: Define important business analytics terms including big data, business analytics, data mining, and data visualization.

35. If big data has variety, then it can be said that the data are from several different sources such as videos, retail scanners, and the internet.
Ans: True
Response: See section 1.3: Introduction to Business Analytics
Difficulty: Easy
Learning Objective: 1.6: List the four dimensions of big data and explain the differences between them.

36. Velocity refers to the speed with which data are available to the business for analysis.
Ans: ~~False~~True
Response: See section 1.3: Introduction to Business Analytics
Difficulty: Easy
Learning Objective: 1.6: List the four dimensions of big data and explain the differences between them.

37. The term “garbage in, garbage out” refers to the volume of the data used by a business.

Ans: False
Response: See section 1.3: Introduction to Business Analytics
Difficulty: Easy
Learning Objective: 1.6: List the four dimensions of big data and explain the differences between them.

38. Big data can include unstructured data such as writings and photographs.
Ans: True
Response: See section 1.3: Introduction to Business Analytics
Difficulty: Easy
Learning Objective: 1.6: List the four dimensions of big data and explain the differences between them.

39. Big data should encompass all four characteristics of variety, velocity, virtuous, and volume.
Ans: False
Response: See section 1.3: Introduction to Business Analytics
Difficulty: Easy
Learning Objective: 1.6: List the four dimensions of big data and explain the differences between them.

40. Descriptive statistics focuses on what has happened or is happening within the business.
Ans: True
Response: See section 1.3: Introduction to Business Analytics
Difficulty: Easy
Learning Objective: 1.7: Compare and contrast the three categories of business analytics.

41. Prescriptive analytics is the second step in big data analysis, following descriptive statistics.
Ans: False
Response: See section 1.3: Introduction to Business Analytics
Difficulty: Easy
Learning Objective: 1.7: Compare and contrast the three categories of business analytics.

42. Prescriptive analytics is optimal for taking risk and uncertainty into account by looking at the effects of future actions.
Ans: True
Response: See section 1.3: Introduction to Business Analytics
Difficulty: Easy
Learning Objective: 1.7: Compare and contrast the three categories of business analytics.

43. Simulation is a mathematical strategy one would expect to find within both predictive and prescriptive analytics.
Ans: True~~False~~
Response: See section 1.3: Introduction to Business Analytics

Difficulty: Easy
Learning Objective: 1.7: Compare and contrast the three categories of business analytics.

44. The three categories of business analytics could be described as describing what has happened, predicting potential relationships among data, and prescribing future decisions under uncertainty.
Ans: True
Response: See section 1.3: Introduction to Business Analytics
Difficulty: Easy
Learning Objective: 1.7: Compare and contrast the three categories of business analytics.

Multiple Choice

2745. Which of the following statements about business statistics is not true?
a) Virtually every area of business uses statistics in decision making.
b) Presenting business statistics always requires the use of a specific graph called a bar chart.
c) There is a wide variety of uses and applications of statistics in business.
d) Business statistics can be used to forecast future values and predict trends.

Ans: b
Response: See section 1.1, Basic Statistical ConceptsStatistics in Business
Difficulty: Easy
Learning Objective: 1.1: List quantitative and graphical examples of statistics within a business context.

46. A book publisher uses statistics in decision-making. Of the following statistics, which would this publisher not consider in their decisions.decisions?
a) Trends in purchases of hard copy and ebooks.
b) The cost of paper.
c) Trends in attendance at book clubs
d) Trends in local grocery stores
e) Revenue of competitors

Ans: d
Response: See section 1.1, Basic Statistical Concepts
Difficulty: Medium
Learning Objective: 1.1: List quantitative and graphical examples of statistics within a business context.

47. Which of the following would be the least helpful type of data to a car manufacturer when making business decisions?
a) Economic data

b) School attendance data
c) Financial data
d) Competitor data
e) Employment data

Ans: bd
Response: See section 1.1, Basic Statistical Concepts
Difficulty: Medium
Learning Objective: 1.1: List quantitative and graphical examples of statistics within a business context.

48. Which of the following is not a graphical example of business statistics?
a) A table that lists all customers
b) A pie chart of careers at the company
c) A graph of profits for the last ten years
d) A bar graph of sales by product
e) A chart of dividends paid out the past few years

Ans: a
Response: See section 1.1, Basic Statistical Concepts
Difficulty: Medium
Learning Objective: 1.1: List quantitative and graphical examples of statistics within a business context.

49. -A news report states that sales of U.S. homes declined 3% during the previous month. Which type of business would be most likely to include this information in their business decisions?
a) car manufacturer
b) business attire
c) lumber company
d) deli stores
e) gas and oil companies

Ans: c
Response: See section 1.1, Basic Statistical Concepts
Difficulty: Medium
Learning Objective: 1.1: List quantitative and graphical examples of statistics within a business context.

50. If the U.S. Census indicated that in general, the population was moving to the northern states, what business decisions might that information impact?
a) How much inventory to hold
b) Whether to increase product prices
c) Whether to build a new plant
d) How much to spend on a new plant
e) Where to locate a new plant

Ans: e
Response: See section 1.1, Basic Statistical Concepts

Difficulty: Medium
Learning Objective: 1.1: List quantitative and graphical examples of statistics within a business context.

51. If the U.S. Census indicated that in general, wages having increased, what business decisions might that information impact?
a) How much inventory to hold
b) Whether to increase product prices
c) Whether to build a new plant
d) How much to spend on a new plant
e) Where to locate a new plant

Ans: b
Response: See section 1.1, Basic Statistical Concepts
Difficulty: Medium
Learning Objective: 1.1: List quantitative and graphical examples of statistics within a business context.

52. If data indicated that a new product could serve as a cheaper substitute for a company's product, the CEO of the latter company might _____:
a) increase prices
b) decrease costs
c) look for a new, unique use of his/her product
d) try to put the competitor out of business
e) close several production plans

Ans: c
Response: See section 1.1, Basic Statistical Concepts
Difficulty: Medium
Learning Objective: 1.1: List quantitative and graphical examples of statistics within a business context.

53. Many companies sponsor local sporting teams and events. What data is least likely to be part of the decision to sponsor that event?
a) Whether that event is somehow tied to their product
b) Whether costs will be decreased through the sponsorship
c) The overlap of event attendees and the company's customers
d) The perceived goodwill in the community of such a sponsorship
e) Potential sales that could occur at the event

Ans: b
Response: See section 1.1, Basic Statistical Concepts
Difficulty: Medium
Learning Objective: 1.1: List quantitative and graphical examples of statistics within a business context.

54.

28. Rebecca Sear, Marketing Director of a regional restaurant chain, is directing a study to identify and assess the in-dining experience of the customers at one of the restaurants. She directs her staff to design a web-based market survey for distribution to all of the restaurant's 1265 customers who enjoyed a meal during the past 6 months. For this study, the set of 1265 customers is _____.
a) a parameter
b) a sample
c) the population
d) a statistic
e) the frame

Ans: c
Response: See section 1.2, Data MeasurementBasic Statistical Concepts
Difficulty: Easy
Learning Objective: 1.2: define Define important statistical terms, including population, sample, and parameter, as they relate to descriptive and inferential statistics.

2955. Rebecca Sear, Marketing Director of a regional restaurant chain, is directing a study to identify and assess the in-dining experience of the customers at one of the restaurants. She directs her staff to design a web-based market survey for distribution to all of the restaurant's 100 of all the restaurant's customers who enjoyed a meal during the past 6 months. For this study, the set of 100 customers is _____.
a) a parameter
b) a sample
c) the population
d) a statistic
e) the frame

Ans: b
Response: See section 1.2, Data MeasurementBasic Statistical Concepts
Difficulty: Easy
Learning Objective: 1.2: define Define important statistical terms, including population, sample, and parameter, as they relate to descriptive and inferential statistics.

3056. Sue Taylor, Director of Global Industrial Sales, is concerned by a deteriorating sales trend. Specifically, the number of industrial customers is stable at 1,500, but they are purchasing less each year. She orders her staff to search for causes of the downward trend by surveying all 1,500 industrial customers. For this study, the set of 1,500 industrial customers is _____.
a) a parameter
b) a sample
c) the population
d) a statistic
e) the frame

Ans: c
Response: See section 1.2, Data MeasurementBasic Statistical Concepts
Difficulty: Easy

Learning Objective: 1.2: ~~define~~ Define important statistical terms, including population, sample, and parameter, as they relate to descriptive and inferential statistics.

~~31~~57. Sue Taylor, Director of Global Industrial Sales, is concerned by a deteriorating sales trend. Specifically, the number of industrial customers is stable at 1,500, 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 40 industrial customers. For this study, the set of 40 industrial customers is _____.
a) a parameter
b) a sample
c) the population
d) a statistic
e) the frame

Ans: b
Response: See section 1.2, Basic Statistical Concepts
Difficulty: Easy
Learning Objective: 1.2: ~~define~~ Define important statistical terms, including population, sample, and parameter, as they relate to descriptive and inferential statistics.

~~32~~58. Miguel Hernandez, Senior Vice President of Human Resources at Memorial Hospital, is exploring the usage of nursing ~~over-time~~overtime hours in the emergency department during the last operating year (January 1, ~~2012~~2018, through December 31, ~~2012~~2018). Miguel intends to survey the emergency department nurses regarding their perception of ~~over-time~~overtime needs. For this survey ~~y~~ the set of all emergency department nurses who worked at Memorial Hospital during the last operating year is _____.
a) a parameter
b) a sample
c) the population
d) a statistic
e) the frame

Ans: c
Response: See section 1.2, Data Measurement~~Basic Statistical Concepts~~
Difficulty: Easy
Learning Objective: 1.2: ~~define~~ Define important statistical terms, including population, sample, and parameter, as they relate to descriptive and inferential statistics.

~~33~~59. Miguel Hernandez, Senior Vice President of Human Resources at Memorial Hospital is exploring the usage of nursing overtime hours in the emergency department during the last operating year. Staffing records and emergency department visits for 20 days between the period of January 1, ~~2012~~2018, and December 31, ~~2012~~2018, are selected for analysis. For this study, the group of 20 days is a _____.
a) parameter
b) sample
c) population
d) statistic

e) frame

Ans: b
Response: See section 1.2, Data Measurement Basic Statistical Concepts
Difficulty: Easy
Learning Objective: 1.2: define Define important statistical terms, including population, sample, and parameter, as they relate to descriptive and inferential statistics.

3460. When a person collects information from the entire population, this is called a _____.
a) parameter
b) sample
c) population
d) census
e) statistic

Ans: d
Response: See section 1.2, Data Measurement Basic Statistical Concepts
Difficulty: Easy
Learning Objective: 1.2: define Define important statistical terms, including population, sample, and parameter, as they relate to descriptive and inferential statistics.

3561.Miguel Hernandez, Senior Vice President of Human Resources at Memorial Hospital is exploring the usage of nursing overtime hours in the emergency department during the last operating year. Staffing records and emergency department visits for all 360 365 days between the period of January 1, 20122018, and December 31, 20122018, are selected for analysis. Miguel's dataset collection method can best be classified as a
a) statistic
b) census
c) sample
d) sorting
e) parameter

Ans: b
Response: See section 1.2, Data Measurement Basic Statistical Concepts
Difficulty: Easy
Learning Objective: 1.2: define Define important statistical terms, including population, sample, and parameter, as they relate to descriptive and inferential statistics.

3662.Sue Taylor, Director of Global Industrial Sales, is concerned by a deteriorating sales trend. Specifically, the number of customers is stable at 1,500, but they are purchasing less each year. She orders her staff to search for causes of the downward trend by surveying all 1,500 industrial customers. Sue is ordering a _____.
a) statistic from the industrial customers
b) census of the industrial customers
c) sample of the industrial customers

d) sorting of the industrial customers
e) parameter of the industrial customers

Ans: b
Response: See section 1.2, Basic Statistical Concepts
Difficulty: Easy
Learning Objective: 1.2: ~~define~~ Define important statistical terms, including population, sample, and parameter, as they relate to descriptive and inferential statistics.

~~37~~63.Sue Taylor, Director of Global Industrial Sales, is concerned by a deteriorating sales trend. Specifically, the number of customers is stable at 1,500, 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 40 industrial customers. Sue is ordering a _____.
a) statistic from the industrial customers
b) census of the industrial customers
c) sample of the industrial customers
d) sorting of the industrial customers
e) parameter of the industrial customers

Ans: c
Response: See section 1.2, Data Measurement~~Basic Statistical Concepts~~
Difficulty: Easy
Learning Objective: 1.2: ~~define~~ Define important statistical terms, including population, sample, and parameter, as they relate to descriptive and inferential statistics.

~~38~~64.Pinky Bauer, Chief Financial Officer of Harrison Haulers, Inc., suspects irregularities in the payroll system, and orders an inspection of "each and every payroll voucher issued since January 1, 2013." Pinky is ordering a _____.
a) statistic from the payroll vouchers
b) census of the payroll vouchers
c) sample of the payroll vouchers
d) sorting of the payroll vouchers
e) parameter of the payroll vouchers

Ans: b
Response: See section 1.2, Data Measurement~~Basic Statistical Concepts~~
Difficulty: Easy
Learning Objective: 1.2: ~~define~~ Define important statistical terms, including population, sample, and parameter, as they relate to descriptive and inferential statistics.

~~39~~65.Pinky Bauer, Chief Financial Officer of Harrison Haulers, Inc., suspects irregularities in the payroll system, and orders an inspection of "every tenth payroll voucher issued since January 1, 2013." Pinky is ordering a _____.
a) statistic from the payroll vouchers
b) census of the payroll vouchers

c) sample of the payroll vouchers
d) sorting of the payroll vouchers
e) parameter of the payroll vouchers

Ans: c
Response: See section 1.2, Data Measurement~~Basic Statistical Concepts~~
Difficulty: Easy
Learning Objective: 1.2: ~~define~~ Define important statistical terms, including population, sample, and parameter, as they relate to descriptive and inferential statistics.

~~40~~66.On discovering an improperly adjusted drill press, Jack Joyner, Director of Quality Control, ordered a 100% inspection of all castings drilled during the evening shift. Jack is ordering a _____.
a) statistic from the castings
b) census of the castings
c) sample of the castings
d) sorting of the castings
e) parameter of the castings

Ans: b
Response: See section 1.2, Data Measurement~~Basic Statistical Concepts~~
Difficulty: Easy
Learning Objective: 1.2: ~~define~~ Define important statistical terms, including population, sample, and parameter, as they relate to descriptive and inferential statistics.

~~41~~67.On discovering an improperly adjusted drill press, Jack Joyner, Director of Quality Control, ordered an inspection of every fifth casting drilled during the evening shift. Jack is ordering a _____.
a) statistic from the castings
b) census of the castings
c) sample of the castings
d) sorting of the castings
e) parameter of the castings

Ans: c
Response: See section 1.2, Data Measurement~~Basic Statistical Concepts~~
Difficulty: Easy
Learning Objective: 1.2: ~~define~~ Define important statistical terms, including population, sample, and parameter, as they relate to descriptive and inferential statistics.

~~42~~68. The process of summarizing ~~the~~ sample data is called
a) inferential statistics
b) nominal data
c) descriptive statistics
d) deferential statistics

e) nonparametric statistics

Ans: c
Response: See section 1.2, Data MeasurementBasic Statistical Concepts
Difficulty: Easy
Learning Objective: 1.2: define Define important statistical terms, including population, sample, and parameter, as they relate to descriptive and inferential statistics.

4369.A cancer research group was interested in determining the percentage of women 40 years or older that have regularly scheduled mammograms. To accomplish this, they surveyed 500 women in this age group and based on the 155 women that responded affirmatively, estimated the percentage of all women in this age group that have regularly scheduled mammograms. This process is an example of _____.
a) nonparametric statistics
b) nominal data
c) descriptive statistics
d) inferential statistics
e) census

Ans: d
Response: See section 1.2, Data MeasurementBasic Statistical Concepts
Difficulty: Medium
Learning Objective: 1.2: define Define important statistical terms, including population, sample, and parameter, as they relate to descriptive and inferential statistics.

4470. A local manufacturing plant randomly selected 200 items from a production run and 9 of them are defective. The proportion of defective items in this sample is a _____.
a) parameter
b) sample
c) population
d) statistic
e) frame

Ans: d
Response: See section 1.2, Data MeasurementBasic Statistical Concepts
Difficulty: Medium
Learning Objective: 1.2: define Define important statistical terms, including population, sample, and parameter, as they relate to descriptive and inferential statistics.

4571.Using data from a group to generalize to a larger group involves the use of _____.
a) descriptive statistics
b) inferential statistics
c) population derivation
d) sample persuasion
e) relative level data

Ans: b
Response: See section 1.2, Data Measurement~~Basic Statistical Concepts~~
Difficulty: Medium
Learning Objective: 1.2: ~~define~~ Define important statistical terms, including population, sample, and parameter, as they relate to descriptive and inferential statistics.

~~46~~72.A student makes an 82 on the first test in a statistics course. From this, she estimates that her average at the end of the semester (after other tests) will be about 82. This is an example of _____.
a) descriptive statistics
b) inferential statistics
c) population derivation
d) sample persuasion
e) relative level data

Ans: b
Response: See section 1.2, Data Measurement~~Basic Statistical Concepts~~
Difficulty: Medium
Learning Objective: 1.2: ~~define~~ Define important statistical terms, including population, sample, and parameter, as they relate to descriptive and inferential statistics.

~~47~~73.Jessica Salas, ~~president~~ President of Salas Products, is reviewing the warranty policy for her company's new model of automobile batteries. Life tests performed on a sample of 100 batteries indicated an average life of seven years under normal usage. Jessica recommended a six-year warranty period for the new model. This is an example of _____.
a) descriptive statistics
b) executive forecasting
c) population derivation
d) sample persuasion
e) inferential statistics

Ans: e
Response: See section 1.2, Data Measurement~~Basic Statistical Concepts~~
Difficulty: Hard
Learning Objective: 1.2: ~~define~~ Define important statistical terms, including population, sample, and parameter, as they relate to descriptive and inferential statistics.

~~48~~74.On discovering an improperly adjusted drill press, Jack Joyner, Director of Quality Control, ordered an inspection of every fifth casting drilled during the evening shift. Less than 1% of the sampled castings were defective; so, Jack released the evening shift's production to assembly. This is an example of _____.
a) nonparametric statistics
b) nominal data
c) descriptive statistics
d) inferential statistics
e) judgmental statistics

Ans: d
Response: See section 1.2, Data MeasurementBasic Statistical Concepts
Difficulty: Hard
Learning Objective: 1.2: define Define important statistical terms, including population, sample, and parameter, as they relate to descriptive and inferential statistics.

4975.A new sales person is paid a commission on each sale. This person made $2,000 in commission his first month on the job. From this he concludes that he will make $24,000 during his first year. This is an example of _____.
a) inferential statistics
b) nominal data
c) descriptive statistics
d) deferential statistics
e) nonparametric statistics

Ans: a
Response: See section 1.2, Data MeasurementBasic Statistical Concepts
Difficulty: Hard Medium
Learning Objective: 1.2: define Define important statistical terms, including population, sample, and parameter, as they relate to descriptive and inferential statistics.

5076.A market researcher is interested in determining the average income for families in Duval County, Florida. To accomplish this, she takes a random sample of 400 families from the county and uses the data gathered from them to estimate the average income for families of in the entire county. This process is an example of _____.
a) nonparametric statistics
b) nominal data
c) descriptive statistics
d) inferential statistics
e) census

Ans: d
Response: See section 1.2, Data MeasurementBasic Statistical Concepts
Difficulty: Medium
Learning Objective: 1.2: define Define important statistical terms, including population, sample, and parameter, as they relate to descriptive and inferential statistics.

5177.The Universal Pulp Company has a plant in Portland, Oregon. Management wants to determine the average number of sick days taken per worker in this plant in 20122018. To do this, the management gathers records on all the workers in the plant and averages the number of sick days taken in 2012 2018 by each worker. This process is using _____.
a) nonparametric statistics
b) nominal data
c) descriptive statistics

d) inferential statistics
e) a census

Ans: e
Response: See section 1.2, Data Measurement~~Basic Statistical Concepts~~
Difficulty: Medium
Learning Objective: 1.2: ~~define~~ Define important statistical terms, including population, sample, and parameter, as they relate to descriptive and inferential statistics.

~~52~~78. The Magnolia Swimming Pool Company wants to determine the average number of years it takes before a major repair is required on one of the pools that the company constructs. The president of the company asks Rick Johnson, a company accountant, to randomly contact fifty families that built Magnolia pools in the past ten years and determine how long it was in each case until a major repair. The information will then be used to estimate the average number of years until a major repair for all pools sold by Magnolia. The average based on the data gathered from the fifty families can best be described as a _____.
a) parameter
b) sample
c) population
d) statistic
e) frame
Ans: d

Response: See section 1.2, Data Measurement~~Basic Statistical Concepts~~
Difficulty: Medium
Learning Objective: 1.2: ~~define~~ Define important statistical terms, including population, sample, and parameter, as they relate to descriptive and inferential statistics.

~~53~~79.The Chamber of Commerce wants to assess its membership's opinions of the North American Free Trade Agreement. One-hundred of the 2,000 members are randomly selected and contacted by telephone. Seventy-five reported an overall favorable opinion, and twenty-five reported an overall unfavorable opinion. The proportion, 0.75, is a _____.
a) parameter
b) statistic
c) population
d) sample
e) frame

Ans: b
Response: See section 1.2, Data Measurement~~Basic Statistical Concepts~~
Difficulty: Medium
Learning Objective: 1.2: ~~define~~ Define important statistical terms, including population, sample, and parameter, as they relate to descriptive and inferential statistics.

5480.What proportion of San Diego's registered voters favors trade restrictions with China? In an effort to determine this, a research team calls every registered voter in San Diego and contacts them. The proportion determined from the data gathered is a _____.
a) parameter
b) sample
c) population
d) statistic
e) frame

Ans: a
Response: See section 1.2, Data Measurement Basic Statistical Concepts
Difficulty: Medium
Learning Objective: 1.2: define Define important statistical terms, including population, sample, and parameter, as they relate to descriptive and inferential statistics.

5581.A researcher wants to know what the average variation is in the altimeters of small, privately owned airplanes. The task of determining this is expensive and time consuming, if even possible, given the large number of such airplanes. The researcher decides to use government records to randomly locate the owners of ten such planes and then get permission to test the altimeters in those planes. When the researcher is done, he will use the data gathered from the group of ten to reach conclusions about all small, privately owned airplanes. This process can best be described as _____.
a) data statistics
b) research statistics
c) descriptive statistics
d) inferential statistics
e) nonparametric statistics

Ans: d
Response: See section 1.2, Data Measurement Basic Statistical Concepts
Difficulty: Medium
Learning Objective: 1.2: define Define important statistical terms, including population, sample, and parameter, as they relate to descriptive and inferential statistics.

5682.A researcher wants to know what the average variation is in the altimeters of small, privately owned airplanes. The task of determining this is expensive and time consuming, if even possible, given the large number of such airplanes. The researcher decides to use government records to randomly locate the owners of ten such planes and then get permission to test the altimeters in those planes. When the researcher is done, he will use the data gathered from the group of ten to reach conclusions about all small, privately owned airplanes. The average variation computed using the data gathered on the group of ten airplanes is best described as a _____.
a) measurement
b) data
c) statistic
d) parameter
e) census

Ans: c

Response: See section 1.2, Data Measurement~~Basic Statistical Concepts~~
Difficulty: Medium
Learning Objective: 1.2: ~~define~~ Define important statistical terms, including population, sample, and parameter, as they relate to descriptive and inferential statistics.

~~57~~83. Which of the following is not a random variable when flipping a coin?
a) Assigning 1 when Tail and 0 when Head
b) Assigning 0 when Head and 1 when Tail
c) The list of outcomes Head and Tail
d) The number of Heads
e) Assigning 1 when Tail or Head

Ans: e
Response: See section 1.3 Introduction to Business Analytics~~Variable and data~~
Difficulty: Hard
Learning Objective: 1.3: Explain the difference between variables, measurement, and data.

~~58~~84. Which of the following measurement processes is least likely to yield usable data?
a) Counting the number of shoppers entering the department store between 12 pm and 2 pm.
b) Studying cell phone bills and recording the number of text messages sent per month.
c) Performing a consumer survey of preferences in fast food chains.
d) Asking students to list three things that are important to them.
e) Calculating the percent of college students who work at least 20 hours while attending school.

Ans: d
Response: See section 1.3 Introduction to Business Analytics~~Variable and data~~
Difficulty: Medium
Learning Objective: 1.3: Explain the difference between variables, measurement, and data.

~~59~~85. Which of the following statements is correct?
a) Business researchers rarely give attention to collecting meaningful data.
b) Variables are data that can be directly used for decision making.
c) Valid data are the lifeblood of business statistics.
d) Measurements never need to be defined by the business researcher.
e) Business statistics are extremely complex and hard to use for decision making.

Ans: c
Response: See section 1.3 Introduction to Business Analytics~~Variable and data~~
Difficulty: Hard
Learning Objective: 1.3: Explain the difference between variables, measurement, and data.

~~60~~86.The lowest level of data measurement is _____.
a) interval level

b) ordinal level
c) nominal level
d) ratio level
e) minimal level

Ans: c
Response: See section 1.4 Introduction to Business Analytics~~Data Measurement~~
Difficulty: Easy
Learning Objective: 1.4: Compare the four different levels of data: nominal, ordinal, interval, and ratio.

~~61~~87.Which of the following operations is meaningful for processing nominal data?
a) Addition
b) Multiplication
c) Ranking
d) Counting
e) Division

Ans: d
Response: See section 1.4 Data Measurement
Difficulty: Medium
Learning Objective: 1.4: Compare the four different levels of data: nominal, ordinal, interval, and ratio.

~~62~~88.Which scale of measurement has these two properties: linear distance is meaningful and the location of origin (or zero point) is arbitrary?
a) Interval level
b) Ordinal level
c) Nominal level
d) Ratio level
e) Minimal level

Ans: a
Response: See section 1.4, Data Measurement
Difficulty: Medium
Learning Objective: 1.4: Compare the four different levels of data: nominal, ordinal, interval, and ratio.

~~63~~89.Which scale of measurement has these two properties: linear distance is meaningful and the location of origin (or zero point) is absolute (or natural)?
a) Interval level
b) Ordinal level
c) Nominal level
d) Ratio level
e) Relative level

Ans: d
Response: See section 1.4, Data Measurement

Difficulty: Medium
Learning Objective: 1.4: Compare the four different levels of data: nominal, ordinal, interval, and ratio.

~~64~~90.Sue Taylor, Director of Global Industrial Sales, is concerned by a deteriorating sales trend. Specifically, the number of customers is stable at 1,500, but they are purchasing less each year. She orders her staff to search for causes of the downward trend by surveying all 1,500 industrial customers. One question on the survey asked the customers: "Which of the following best describes your primary business: a. manufacturing, b. wholesaler, c. retail, d. service." The measurement level for ~~this~~ these possible responses ~~question~~ is _____.
a) interval level
b) ordinal level
c) nominal level
d) ratio level
e) relative level

Ans: c
Response: See section 1.4, Data Measurement
Difficulty: Easy
Learning Objective: 1.4: Compare the four different levels of data: nominal, ordinal, interval, and ratio.

~~65~~91.A question in a survey of microcomputer users asked: "Which operating system do you use most often: a. Apple OS 7, b. MS DOS, c. MS Windows 95, d. UNIX." The measurement level for ~~this question~~these possible responses is _____.
a) nominal level
b) ordinal level
c) interval level
d) ratio level
e) relative level

Ans: a
Response: See section 1.4, Data Measurement
Difficulty: Easy
Learning Objective: 1.4: Compare the four different levels of data: nominal, ordinal, interval, and ratio.

~~66~~92.Which of the following operations is meaningful for processing ordinal data, but is meaningless for processing nominal data?
a) Addition
b) Multiplication
c) Ranking
d) Counting
e) Division

Ans: c
Response: See section 1.4, Data Measurement
Difficulty: Medium

Learning Objective: 1.4: Compare the four different levels of data: nominal, ordinal, interval, and ratio.

6793.Sue Taylor, Director of Global Industrial Sales, is concerned by a deteriorating sales trend. Specifically, the number of customers is stable at 1,500, but they are purchasing less each year. She orders her staff to search for causes of the downward trend by surveying all 1,500 industrial customers. One question on the survey asked the customers: "How many people does your company employ? The measurement level for this question is _____.
a) interval level
b) ordinal level
c) nominal level
d) relative level
e) ratio level

Ans: e
Response: See section 1.4, Data Measurement
Difficulty: Easy
Learning Objective: 1.4: Compare the four different levels of data: nominal, ordinal, interval, and ratio.

6894. A consumer has been asked to rank five cars based upon their desirability. This level of measurement is _____.
a) interval level
b) ordinal level
c) nominal level
d) ratio level
e) relative level

Ans: b
Response: See section 1.4, Data Measurement
Difficulty: Easy
Learning Objective: 1.4: Compare the four different levels of data: nominal, ordinal, interval, and ratio.

6995.Morningstar Mutual Funds analyzes the risk and performance of mutual funds. Each mutual fund is assigned an overall rating of one to five stars. One star is the lowest rating, and five stars is the highest rating. This level of measurement is _____.
a) ordinal level
b) interval level
c) nominal level
d) ratio level
e) relative level

Ans: a
Response: See section 1.4, Data Measurement
Difficulty: Easy
Learning Objective: 1.4: Compare the four different levels of data: nominal, ordinal, interval, and ratio.

~~70~~96.A level of data measurement that has an absolute zero is called _____.
a) interval level
b) ordinal level
c) nominal level
d) ratio level
e) relative level

Ans: d
Response: See section 1.4, Data Measurement
Difficulty: Easy
Learning Objective: 1.4: Compare the four different levels of data: nominal, ordinal, interval, and ratio.

~~71~~97.A person has decided to code a particular set of sales data. A value of 0 is assigned if the sales occurred on a weekday, and a value of 1 means it happened on a weekend. This is an example of _____.
a) interval level data
b) ordinal level data
c) nominal level data
d) ratio level data
e) relative level data

Ans: c
Response: See section 1.4, Data Measurement
Difficulty: ~~Easy~~ Medium
Learning Objective: 1.4: Compare the four different levels of data: nominal, ordinal, interval, and ratio.

~~72~~98.Members of the accounting department's clerical staff were asked to rate their supervisor's leadership style as either (1) authoritarian or (2) participatory. This is an example of _____.
a) interval level data
b) ordinal level data
c) nominal level data
d) ratio level data
e) relative level data

Ans: c
Response: See section 1.4, Data Measurement
Difficulty: Easy
Learning Objective: 1.4: Compare the four different levels of data: nominal, ordinal, interval, and ratio.

~~73~~99. A market research analyst has asked consumers to rate the appearance of a new package on a scale of 1 to 5. A 1 means that the appearance is awful while a 5 means that it is excellent. The measurement level of this data is _____.
a) interval level data

b) ordinal level data
c) nominal level data
d) ratio level data
e) relative level data

Ans: b
Response: See section 1.4, Data Measurement
Difficulty: Easy
Learning Objective: 1.4: Compare the four different levels of data: nominal, ordinal, interval, and ratio.

~~74~~100.The social security number of employees would be an example of what level of data measurement?
a) Interval level data
b) Ordinal level data
c) Nominal level data
d) Ratio level data
e) Relative level data

Ans: c
Response: See section 1.4, Data Measurement
Difficulty: Medium
Learning Objective: 1.4: Compare the four different levels of data: nominal, ordinal, interval, and ratio.

~~75~~101.Sales of a restaurant (in dollars) are an example of what level of data measurement?
a) Interval level data
b) Ordinal level data
c) Nominal level data
d) Ratio level data
e) Relative level data

Ans: d
Response: See section 1.4 Data Measurement
Difficulty: Easy
Learning Objective: 1.4: Compare the four different levels of data: nominal, ordinal, interval, and ratio.

~~76~~102.Grades on a test range from 0 to 100. This level of data is _____.
a) interval level data
b) ordinal level data
c) nominal level data
d) ratio level data
e) relative level data

Ans: d
Response: See section 1.4 Data Measurement
Difficulty: Easy
Learning Objective: 1.4: Compare the four different levels of data: nominal, ordinal, interval, and ratio.

~~77~~103.If it were not for the existence of an "absolute zero," ratio data would be considered the same as _____.
a) interval level data
b) ordinal level data
c) nominal level data
d) ratio level data
e) relative level data

Ans: a
Response: See section 1.4 Data Measurement
Difficulty: Medium
Learning Objective: 1.4: Compare the four different levels of data: nominal, ordinal, interval, and ratio.

~~78~~104.Scholastic Aptitude Test scores are an example of what type of measurement scale?
a) Interval level data
b) Ordinal level data
c) Nominal level data
d) Ratio level data
e) Relative level data

Ans: a
Response: See section 1.4 Data Measurement
Difficulty: ~~Easy~~ Medium
Learning Objective: 1.4: Compare the four different levels of data: nominal, ordinal, interval, and ratio.

~~79~~105.Which types of data are normally ~~used in parametric statistics~~called metric data?
a) Interval or ratio level data
b) Ordinal or nominal level data
c) Nominal or ratio level data
d) Ratio or ordinal level data
e) Relative or ratio level data

Ans: a
Response: See section 1.4 Data Measurement
Difficulty: ~~Hard~~ Medium
Learning Objective: 1.4: Compare the four different levels of data: nominal, ordinal, interval, and ratio.

~~80~~106.Which types of data are normally ~~used with nonparametric statistics~~called nonmetric data?
a) Interval or ratio level data
b) Ordinal or nominal level data
c) Nominal or ratio level data
d) Ratio or ordinal level data

e) Relative or ratio level data

Ans: b
Response: See section 1.4 Data Measurement
Difficulty: ~~Hard~~ Medium
Learning Objective: 1.4: Compare the four different levels of data: nominal, ordinal, interval, and ratio.

~~81~~107.How much inventory do Christmas tree sales lots keep? A researcher goes from location to location around the city counting the number of trees in each lot. These numbers most likely represent what level of data?
a) Interval level
b) Ordinal level
c) Nominal level
d) Ratio level
e) Relative level

Ans: d
Response: See section 1.4 Basic Data Measurement
Difficulty: Easy
Learning Objective: 1.4: Compare the four different levels of data: nominal, ordinal, interval, and ratio.

~~82~~108.During the Valentine's season, different offices in a company are encouraged to decorate their doors. A committee then goes around and ranks the doors according to how well the doors are decorated. The best door gets a ranking of "1"; the second best gets a ranking of "2", etc. The numbers of these rankings represent which level of data?
a) Interval level
b) Ordinal level
c) Nominal level
d) Ratio level
e) Relative level

Ans: b
Response: See section 1.4 Data Measurement
Difficulty: Easy
Learning Objective: 1.4: Compare the four different levels of data: nominal, ordinal, interval, and ratio.

~~83~~109.A large manufacturing company in Indianapolis produces valves for the chemical industry. According to specifications, one particular valve is supposed to have a five-inch opening on the side. Quality control inspectors take random samples of these valves just after the hole is bored. They measure the size of the hole in an effort to determine if the machine ~~is out of adjustment~~needs ~~adjustment~~ to be adjusted. The measurement of the diameter of the hole represents which level of data?
a) Interval level
b) Ordinal level
c) Nominal level
d) Central level

e) Ratio level

Ans: e
Response: See section 1.4 Data Measurement
Difficulty: Medium
Learning Objective: 1.4: Compare the four different levels of data: nominal, ordinal, interval, and ratio.

~~84~~110.A marketing demographic survey is undertaken to determine the market potential for a new product. One of the questions asked is: What type of residence do you live in? Respondents are offered several possible answers including: house, apartment, or condominiums. In order to computerize the survey answers, the responses are coded as a 1 if the answer is "house", a 2 if the answer is an "apartment", and a 3 if the answer is a "condominium". These numbers, 1, 2, and 3, are examples of which level of data?
a) Interval level
b) Ordinal level
c) Nominal level
d) Ratio level
e) Relative level

Ans: c
Response: See section 1.4 Data Measurement
Difficulty: Medium
Learning Objective: 1.4: Compare the four different levels of data: nominal, ordinal, interval, and ratio.

~~85~~111.A marketing survey is conducted to ascertain the market potential~~potentiality~~ of several new products. A series of focus groups is used to conduct this survey. At the end of one of the sessions, the group members are asked to rank the remaining eight products in order of desirability. A one indicates the most favored product and an eight is awarded to the least desirable. These numbers are examples of which level of data?
a) Interval level
b) Ordinal level
c) Nominal level
d) Ratio level
e) Relative level

Ans: b
Response: See section 1.4 Data Measurement
Difficulty: Easy
Learning Objective: 1.4: Compare the four different levels of data: nominal, ordinal, interval, and ratio.

~~86~~112.A business is attempting to find the best small town in the United States in which to relocate. As part of the investigation, the elevations of all small towns in the United States are researched. Some towns are located high in the Rockies with elevations over 8,000 feet. There are even some towns located in the south central valley of California with elevations below sea level. These elevations can best be described as which level of data?

a) Interval level
b) Ordinal level
c) Nominal level
d) Ratio level
e) Relative level

Ans: a
Response: See section 1.4 Data Measurement
Difficulty: Easy
Learning Objective: 1.4: Compare the four different levels of data: nominal, ordinal, interval, and ratio.

~~87~~113. A manager was asked to rate the performance of his employees on a scale of 1 to 6. A 1 means that the performance is awful while a 6 means that it is excellent. The measurement level of this data is _____.
a) interval level data
b) ordinal level data
c) nominal level data
d) ratio level data
e) relative level data

Ans: b
Response: See section 1.4 Data Measurement
Difficulty: Easy
Learning Objective: 1.4: Compare the four different levels of data: nominal, ordinal, interval, and ratio.

~~88~~114. One of the main ways to organize the study of statistics is to divide it in two branches. These two branches are _____ statistics and _____ statistics.
a) positive; normative
b) descriptive; normative
c) positive; inferential
d) descriptive; inferential
e) positive, macro

Ans: d
Response: See section 1.1 Basic Statistical Concepts~~Statistics in Business~~
Difficulty: Easy
AACSB: Reflective thinking
Bloom's level: Knowledge
Learning Objective: 1.1: List quantitative and graphical examples of statistics within a business context.

~~89~~115. You are the owner of a camping site that has a small pond with fish~~es~~, and you want to know approximately ~~the number of~~how many fish~~es~~ are currently in the pond. For this purpose, you catch 30 fish~~es~~ and mark them with a special ink that will take a few days to be washed away. The ink doesn't affect the fish~~es~~ in any way. The fish~~es~~ are returned promptly to the pond after being marked. The next

day at the same time of day you return and catch 30 fish~~es~~, and you find out that 5 of these fish~~es~~ are marked.
a) This is an example of descriptive statistics, because you are describing the number of fish~~es~~ in the pond.
b) This is not an example of statistics.
c) This is an example of inferential statistics, because you ~~are~~ will use the catch on the second day to infer~~ring~~ the population of fish~~es~~.
d) This ~~could be either~~is an example of descriptive ~~or inferential~~ statistics~~, depending on your procedure after you find out that 5 fishes are marked among the selected 30 on the second day~~ as the goal was to determine the proportion marked out of the 30 caught the second day.
e) This procedure would not allow you to estimate the population of fishes.

Ans: c
Response: See section 1.1 Basic Statistical Concepts~~Statistics in Business~~
Difficulty: Hard
AACSB: Analytic
Bloom's level: Application
Learning Objective: 1.1: List quantitative and graphical examples of statistics within a business context.

~~90~~116. You are the owner of a camping site and want to estimate the average age of your customers. For this purpose, you select a representative sample of your clients and offer them a discount ~~good for~~on their next visit as compensation for filling out a short questionnaire that includes relevant age intervals. The average age of your customers being estimated through these responses is:
a) a measurement
b) data
c) a statistic
d) a parameter
e) a census

Ans: d
Response: See section 1.2 Data Measurement~~Basic Statistical Concepts~~
Difficulty: Medium
AACSB: Reflective thinking
Bloom's level: Application
Learning Objective: 1.2: ~~define~~ Define important statistical terms, including population, sample, and parameter, as they relate to descriptive and inferential statistics.

~~91~~117. You are the owner of a camping site and want to estimate the average age of your customers. For this purpose, you select a representative sample of your clients and offer them a discount ~~good for~~ on their next visit as compensation for filling out a short questionnaire that includes relevant age intervals. The average age of the customers who fill out the questionnaire is:
a) a measurement
b) data
c) a statistic
d) a parameter
e) a census

Ans: c
Response: See section 1.2 Data Measurement~~Basic Statistical Concepts~~
Difficulty: Medium
AACSB: Reflective thinking
Bloom's level: Application
Learning Objective: 1.2: ~~define~~ Define important statistical terms, including population, sample, and parameter, as they relate to descriptive and inferential statistics.

~~92~~118. You are the owner of a camping site and want to estimate the average age of your customers. For this purpose, you select a representative sample of your clients and offer them a discount ~~good for~~on their next visit as compensation for filling out a short questionnaire that includes relevant age intervals: "Your age is (a) 30 or younger, (b) 30 to 40, (c) 40 to 50, (c) 50 to 60, (d) 60 or older." This is an example of _____.
a) interval level data
b) ordinal level data
c) nominal level data
d) ratio level data
e) relative level data

Ans: b
Response: See section 1.4 Data Measurement
Difficulty: Medium
AACSB: Reflective thinking
Bloom's level: Application
Learning Objective: 1.4: Compare the four different levels of data: nominal, ordinal, interval, and ratio.

~~93~~119. You are the owner of a camping site and want to estimate the level of customer satisfaction among your clients. For this purpose, you select a representative sample of your clients and offer them a discount ~~good for~~on their next visit as compensation for filling out a short questionnaire. One question specifically says, "How satisfied are you with your experience, on a scale from (1) to (5), where (1) is 'very dissatisfied' and (5) is 'very satisfied'?" This is an example of _____.
a) interval level data
b) ordinal level data
c) nominal level data
d) ratio level data
e) relative level data

Ans: b
Response: See section 1.4 Data Measurement
Difficulty: Easy
AACSB: Reflective thinking
Bloom's level: Application
Learning Objective: 1.4: Compare the four different levels of data: nominal, ordinal, interval, and ratio.

94120. You are the owner of a camping site and want to evaluate the feasibility of opening earlier during the year. For this analysis, you obtain the average maximum and minimum local daily temperatures for early spring. This is an example of _____.
a) interval level data
b) ordinal level data
c) nominal level data
d) ratio level data
e) relative level data

Ans: a
Response: See section 1.4 Data Measurement
Difficulty: Medium
AACSB: Reflective thinking
Bloom's level: Application
Learning Objective: 1.4: Compare the four different levels of data: nominal, ordinal, interval, and ratio.

121. A business manager is looking to hire someone who can use large data sets to create business models that can then be used to help the manager make better decisions. The manager is looking to hire someone with _____.
a) mathematics skills
b) science skills
c) business analytics skills
d) qualitative analysis skills
e) business decision skills

Ans: c
Response: See section 1.3 Introduction to Business Analytics
Difficulty: ~~Medium~~Easy
Learning Objective: 1.5: Define important business analytics terms including big data, business analytics, data mining, and data visualization.

122. A business manager has access to a large data set that includes complex information that would be difficult to process with traditional data management. These data would be referred to as _____,
a) big data
b) business data
c) mega data
d) business analytics
e) mined data

Ans: a
Response: See section 1.3 Introduction to Business Analytics
Difficulty: Medium
Learning Objective: 1.5: Define important business analytics terms including big data, business analytics, data mining, and data visualization.

123. Data visualization is a strategy used to:
a) help analysts see the data points
b) convey information as a visual object
c) arrange data so that it can be imported into a statistical analysis program
d) plan a research project
e) transform data into inferential statistics

Ans: b
Response: See section 1.3 Introduction to Business Analytics
Difficulty: Medium
Learning Objective: 1.5: Define important business analytics terms including big data, business analytics, data mining, and data visualization.

124. Which of the following would not be a potential source of data for a furniture manufacturing business?
a) Timber production
b) Social media
c) Customer purchases
d) Operations data
e) Dietary data

Ans: e
Response: See section 1.3 Introduction to Business Analytics
Difficulty: Medium
Learning Objective: 1.5: Define important business analytics terms including big data, business analytics, data mining, and data visualization.

125. By transforming data from social media and competitors, an analyst was able to identify a relationship between an increase in the number of positive online comments about the company and negative marketing ads from its competitors. This relationship was most likely found through _____.
a) the process of data visualization
b) the production of data
c) the process of data elimination
d) the process of data mining
e) the managing of data mining

Ans: d
Response: See section 1.3 Introduction to Business Analytics
Difficulty: Medium
Learning Objective: 1.5: Define important business analytics terms including big data, business analytics, data mining, and data visualization.

126. Big data can be seen as a large amount of either organized or unorganized data that is analyzed to _____:

a) confirm and justify a decision.
b) disprove and refute an assumption.
c) make an informed decision or evaluation.
d) structure and design a methodology.
e) process and eliminate.

Ans: b
Response: See section 1.3 Introduction to Business Analytics
Difficulty: Medium
Learning Objective: 1.5: Define important business analytics terms including big data, business analytics, data mining, and data visualization.

127. An international social media company stores approximately 300 billion images and 1.2 trillion posts. Given just this information, which of the vectors of big data is the most likely focus of this company's data collection?
a) Volume
b) Velocity
c) Variety
d) Veracity
e) Visualization

Ans: a
Response: See section 1.3 Introduction to Business Analytics
Difficulty: Medium
Learning Objective: 1.5: Define important business analytics terms including big data, business analytics, data mining, and data visualization.

128. The need for new methodologies and processing techniques regarding business data has arisen because _____
a) big data sources have become too large and complex.
b) privacy issues related to business data sources.
c) national security concerns regarding data sources.
d) the lack of industry needs for big data sources.
e) decrease in availability of data.

Ans: a
Response: See section 1.3 Introduction to Business Analytics
Difficulty: Medium
Learning Objective: 1.5: Define important business analytics terms including big data, business analytics, data mining, and data visualization.

129. The CIO for a large hospitality business has been inundated with information and data regarding customer needs and spending preferences. However, her in-house data analytics team has advised her that what she really needs is to develop an understanding of relationships. With this knowledge she should will be able to recognize new patterns and undiscovered trends. This category of analytics is called _____.
a) predictive
b) prescriptive
c) descriptive
d) statistical inference
e) production

Ans: a
Response: See section 1.3 Introduction to Business Analytics
Difficulty: Medium
Learning Objective: 1.5: Define important business analytics terms including big data, business analytics, data mining, and data visualization.

130. Online retailers are consistently pursuing new ways to improve market share and establish better relations with customers. One of the most common methods is to provide recommendations when customers place an order based upon similar or complementary items. These most likely patterns in purchases would most be an example of what type of analytics:
a) predictive
b) data mining
c) financial
d) descriptive
e) time sensitive

Ans: a
Response: See section 1.3 Introduction to Business Analytics
Difficulty: Medium
Learning Objective: 1.5: Define important business analytics terms including big data, business analytics, data mining, and data visualization.

131. A company is concerned that the data it has acquired has become so large that its practical use is severely limited) They decide to extract patterns from its present data, increasing its essential value) This would be an example of:
a) data visualization
b) business optimization
c) data mining
d) volume analysis
e) predictive mining

Ans: c
Response: See section 1.3 Introduction to Business Analytics
Difficulty: Medium
Learning Objective: 1.5: Define important business analytics terms including big data, business analytics, data mining, and data visualization.

132. A CEO wants to depict information in creative ways by effectively using bars charts and line graphs. This strategy is an example of _____:
a) data extraction
b) data mining
c) data interpretation
d) data visualization
e) data elimination

Ans: d
Response: See section 1.3 Introduction to Business Analytics
Difficulty: Medium
Learning Objective: 1.5: Define important business analytics terms including big data, business analytics, data mining, and data visualization.

133. Future Video, a gaming company, is awaiting a marketing survey that will tell them how well and in what markets their latest game console is selling. The VP of Marketing has to develop contingency plans for the investors based upon this information. What type of analytics would the VP most likely be using?
a) descriptive
b) visual
c) prescriptive
d) time-series
e) volume

Ans: c
Response: See section 1.3 Introduction to Business Analytics
Difficulty: Medium
Learning Objective: 1.5: Define important business analytics terms including big data, business analytics, data mining, and data visualization.

134. Which is not a primary goal of data mining.
a) turning raw data into useful information
b) discovering and interpreting useful information

c) converting data into useful forms
d) making date accessible to business analytics users
e) deriving results that build a consensus

Ans: e
Response: See section 1.3 Introduction to Business Analytics
Difficulty: Medium
Learning Objective: 1.5: Define important business analytics terms including big data, business analytics, data mining, and data visualization.

135. Which of the following is not true regarding data mining
a) most major industries utilize data mining
b) data mining is performed to confirm a preconceived hypothesis
c) data mining is often performed through a database management system
d) data mining should be used in making future business decisions
e) the first three steps of data mining is extract, transform and load

Ans: b
Response: See section 1.3 Introduction to Business Analytics
Difficulty: Medium
Learning Objective: 1.5: Define important business analytics terms including big data, business analytics, data mining, and data visualization.

136.- The last three steps of data mining are:
a) extract, transform and load
b) manage, extract and transform
c) store, extract and load
d) extract, manage and load
e) load, manage, make available to others

Ans: ~~e~~a
Response: See section 1.3 Introduction to Business Analytics
Difficulty: Medium
Learning Objective: 1.5: Define important business analytics terms including big data, business analytics, data mining, and data visualization.

137. The ultimate goal of data mining is
a) to make data accessible and usable to the business analyst
b) to provide visual representation of data
c) to develop a database management system

d) to study frequency distributions
e) to draw a distinction between variety and velocity

Ans: a
Response: See section 1.3 Introduction to Business Analytics
Difficulty: Medium
Learning Objective: 1.5: Define important business analytics terms including big data, business analytics, data mining, and data visualization.

138.- The CFO of a mid-level investment firm reports that the company has lost thousands of dollars through its data mining process due to poor data accuracy and quality. She is addressing an issue related to:
a) veracity
b) volume
c) business intelligence
d) descriptive analytics
e) sampling distribution

Ans: a
Response: See section 1.3 Introduction to Business Analytics
Difficulty: Medium
Learning Objective: 1.5: Define important business analytics terms including big data, business analytics, data mining, and data visualization.

139. -In a speech, the COO commented on the changes that had taken place in the industry, specifically the amount of information decision makers have available. This is primarily referring to an area called:
a) descriptive analytics
b) application processing
c) data mining
d) big data
e) data visualization

Ans: d
Response: See section 1.3 Introduction to Business Analytics
Difficulty: ~~Medium~~Easy
Learning Objective: 1.5: Define important business analytics terms including big data, business analytics, data mining, and data visualization.

140. Bubble charts where the size of each bubble refers to that item's size compared to the various other items shown, are examples of:
a) mining visualization
b) statistical analysis
c) data extract
d) descriptive analytics
e) data visualization

Ans: e
Response: See section 1.3 Introduction to Business Analytics
Difficulty: Medium
Learning Objective: 1.5: Define important business analytics terms including big data, business analytics, data mining, and data visualization.

141. If a company is concerned that the data they have received may contain some false information, they are concerned about the _____ of the data.
a) variety
b) veracity
c) volume
d) velocity
e) valorous

Ans: b
Response: See section 1.3 Introduction to Business Analytics
Difficulty: Medium
Learning Objective: 1.6: List the four dimensions of big data and explain the differences between them.

142. If a company receives a lot of data within a short amount of time, then the data has both _____ and _____.
a) variety, velocity
b) velocity, veracity
c) veracity, volume
d) velocity, volume
e) variety, veracity

Ans: d
Response: See section 1.3 Introduction to Business Analytics
Difficulty: Medium
Learning Objective: 1.6: List the four dimensions of big data and explain the differences between them.

143. A company has collected data that they believe will help them identify the characteristics of their top customers. After some analysis, it is discovered that they need data on the age and income of these customers. Therefore, the company needs data that has more _____
a) variety

b) velocity
c) customers
d) veracity
e) purchases

Ans: a
Response: See section 1.3 Introduction to Business Analytics
Difficulty: Medium
Learning Objective: 1.6: List the four dimensions of big data and explain the differences between them.

144. If an analyst needed to explain the primary differences between data velocity and veracity, they would most likely say that velocity was related to _____ while veracity was related to _____.
a) reliability, size
b) speed, different sources
c) size, reliability
d) different sources, reliability
e) speed, reliability

Ans: e
Response: See section 1.3 Introduction to Business Analytics
Difficulty: Medium
Learning Objective: 1.6: List the four dimensions of big data and explain the differences between them.

145. -If an analyst needed to explain the primary differences between data variety and volume, they would most likely say that variety was related to _____ while volume was related to _____.
a) reliability, speed
b) speed, different sources
c) size, reliability
d) different sources, size
e) speed, reliability

Ans: d
Response: See section 1.3 Introduction to Business Analytics
Difficulty: Medium
Learning Objective: 1.6: List the four dimensions of big data and explain the differences between them.

146. Which best describes veracity?
a) The data are credible
b) The amount of information is sufficient
c) The data originates from a variety of sources
d) The data are current
e) The data represent a specific industry

Ans: a
Response: See section 1.3 Introduction to Business Analytics
Difficulty: Medium
Learning Objective: 1.6: List the four dimensions of big data and explain the differences between them.

147. During her lecture Professor Lewis stated that extracting and storing data will not ensure business value. The use of big data requires that the user _____.
a) design flashy graphs and charts
b) extrapolate important insights from the data
c) incorporate data from executive staff
d) place a time limit on the collection of data
e) use data collection methods used by your competition

Ans: b
Response: See section 1.3 Introduction to Business Analytics
Difficulty: Medium
Learning Objective: 1.6: List the four dimensions of big data and explain the differences between them.

148. Volume, variety, velocity and veracity are four important characteristics associated with _____.
a) big data
b) descriptive analytics
c) predictive analytics
d) metric analytics
e) business analytics

Ans: a
Response: See section 1.3 Introduction to Business Analytics
Difficulty: ~~Medium~~Easy
Learning Objective: 1.6: List the four dimensions of big data and explain the differences between them.

149. A database management software system is needed for big data to enable users to _____.
a) define, create, maintain, and control access to the database
b) identify, communicate, and compete with the competition
c) redefine, test, and retool products
d) maintain, define, and extract data on the competition
e) transform, load, and manage changes in regulations

Ans: a
Response: See section 1.3 Introduction to Business Analytics
Difficulty: Medium

Learning Objective: 1.6: List the four dimensions of big data and explain the differences between them.

150. After acquiring a major investment firm, managers of the acquiring company needed a process to transform the mountains of the acquired company's data into useful business information. This can be done with _____.
a) extracting management
b) visualization analytics
c) data mining
d) tableau-produced analytics
e) spectrum mining

Ans: c
Response: See section 1.3 Introduction to Business Analytics
Difficulty: Medium
Learning Objective: 1.6: List the four dimensions of big data and explain the differences between them.

151. Which if the following best defines predictive modeling?
a) A process used to determine descriptive statistics of each variable
b) A process used by doctors to choose prescriptions
c) A process used to determine relationships among variables
d) A process used to determine if data have veracity
e) A process used to collect data from various sources

Ans: c
Response: See section 1.3 Introduction to Business Analytics
Difficulty: Medium
Learning Objective: 1.6: List the four dimensions of big data and explain the differences between them.

152. The business phrase "garbage in, garbage out" would most likely be attributed to _____.
a) veracity of data
b) spectrum mining of data
c) volume of data
d) exponential growth of data
e) employment opportunities in data

Ans: a
Response: See section 1.3 Introduction to Business Analytics
Difficulty: Medium
Learning Objective: 1.6: List the four dimensions of big data and explain the differences between them.

153. A software package defined as a category of computer graphics products used to create graphical displays and interfaces for software applications would be used in _____.
a) data monitoring
b) measuring the veracity of data
c) data visualization
d) data mining
e) prescriptive analytics

Ans: c
Response: See section 1.3 Introduction to Business Analytics
Difficulty: Medium
Learning Objective: 1.6: List the four dimensions of big data and explain the differences between them.

154. A company wishes to establish a system that can continually and automatically process new data to improve recommendations and provide better decision options, you are likely dealing in the area of _____.
a) prescriptive analytics
b) extracting analytics
c) visualization
d) tableau-produced bar analytics
e) descriptive analytics

Ans: a
Response: See section 1.3 Introduction to Business Analytics
Difficulty: Medium
Learning Objective: 1.6: List the four dimensions of big data and explain the differences between them.

155. Consumer information, financial reports, supply chain and human resource information are examples of _____.
a) data visualization
b) velocity analytics
c) descriptive analytics
d) statistical inference
e) big data

Ans: e
Response: See section 1.3 Introduction to Business Analytics
Difficulty: Medium
Learning Objective: 1.6: List the four dimensions of big data and explain the differences between them.

156. The potential misuse of statistical data relates to the area of:

a) statistical inference
b) computer interpretation
c) descriptive analytics
d) business ethics
e) nonparametric behavior

Ans: d
Response: See section 1.3 Introduction to Business Analytics
Difficulty: Medium
Learning Objective: 1.6: List the four dimensions of big data and explain the differences between them.

157. Utilizing visual technology to convey information to a diverse audience with a wide range of backgrounds would be an example of _____.
a) data mining
b) prescriptive visualization
c) data visualization
d) velocity analytics
e) network analysis

Ans: c
Response: See section 1.3 Introduction to Business Analytics
Difficulty: Medium
Learning Objective: 1.6: List the four dimensions of big data and explain the differences between them.

158. The process of finding data from numerous sources can be defined as _____.
a) descriptive analytics
b) data extraction
c) data visualization
d) big data
e) artificial intelligence

Ans: b
Response: See section 1.3 Introduction to Business Analytics
Difficulty: Medium
Learning Objective: 1.6: List the four dimensions of big data and explain the differences between them.

159. Most traditional introductory statistics courses focus instruction in the area of _____.
a) network functioning
b) device mobility
c) descriptive analytics
d) discrete visualization
e) visualized forecasting

Ans: c
Response: See section 1.3 Introduction to Business Analytics
Difficulty: Medium
Learning Objective: 1.6: List the four dimensions of big data and explain the differences between them.

160. Simulation, statistical modeling, time-series and regression are topics in _____.
a) predictive analytics
b) prescriptive analytics
c) data visualization
d) network analytics
e) information graphics

Ans: a
Response: See section 1.3 Introduction to Business Analytics
Difficulty: Medium
Learning Objective: 1.6: List the four dimensions of big data and explain the differences between them.

161. The categories of business analytics are most commonly done in which order?
a) Predictive, prescriptive, then descriptive
b) Descriptive, prescriptive, then predictive
c) Prescriptive, descriptive, then predictive
d) Descriptive, predictive, then prescriptive
e) Predictive, descriptive, then prescriptive

Ans: d
Response: See section 1.3 Introduction to Business Analytics
Difficulty: Medium
Learning Objective: 1.7: Compare and contrast the three categories of business analytics.

162. Data visualization is most commonly used in which category of business analytics?
a) Descriptive
b) Predictive
c) Metric
d) Prescriptive
e) Mining

Ans: a
Response: See section 1.3 Introduction to Business Analytics
Difficulty: Medium
Learning Objective: 1.7: Compare and contrast the three categories of business analytics.

163. A company uses business analytics to focus on the best course of action within specific circumstances. This would fit within which category of business analytics?
a) Descriptive
b) Predictive
c) Metric
d) Prescriptive
e) Mining

Ans: d
Response: See section 1.3 Introduction to Business Analytics
Difficulty: Medium
Learning Objective: 1.7: Compare and contrast the three categories of business analytics.

164. Predictive analytics focus on how past patterns might occur in the future. These analyses often rely on patterns that are _____ the future.
a) repeated into
b) decreasing in
c) increasing in
d) steady in
e) extrapolated into

Ans: e
Response: See section 1.3 Introduction to Business Analytics
Difficulty: Medium
Learning Objective: 1.7: Compare and contrast the three categories of business analytics.

165. The category of business analytics that is often used to optimize the performance of a system in the business would be _____.
a) Descriptive
b) Prescriptive
c) Metric
d) Predictive
e) Mining

Ans: d
Response: See section 1.3 Introduction to Business Analytics
Difficulty: Medium
Learning Objective: 1.7: Compare and contrast the three categories of business analytics.

166. A new CEO of has just completed a first data mining project. The analysis did not provide much useful information because not all departments reported and because of an overall smaller than expected sample size. To which characteristics of big data do these issues refer?
a) Variety and volume
b) Veracity and descriptive analysis

c) Value and veracity
d) Predictive and visualization
e) Tableau software analysis and input

Ans: a
Response: See section 1.3 Introduction to Business Analytics
Difficulty: Medium
Learning Objective: 1.7: Compare and contrast the three categories of business analytics.

167. To address the challenges of analyzing big data, several popular statistical software packages are _____.
a) NeXtgen, Hyfi and Domac
b) Minitab, Excel and Tableau
c) Inright, Outgoing and Hyper
d) Logright, Aslate and Numbers
e) Statforce, Statcom and NASA

Ans: b
Response: See section 1.3 Introduction to Business Analytics
Difficulty: Medium
Learning Objective: 1.7: Compare and contrast the three categories of business analytics.

168. What new field of business was established to help business decision makers meet the challenges, opportunities and potentialities presented by big data?
a) Volume analytics
b) Spectrum analytics
c) Ethical analytics
d) Business analytics
e) Mining analytics

Ans: d
Response: See section 1.3 Introduction to Business Analytics
Difficulty: Medium
Learning Objective: 1.7: Compare and contrast the three categories of business analytics.

169. The large growth in the numbers and types of data available to researchers, data scientists, and business decision makers is most commonly referred to as _____.
a) business mining
b) plethora business
c) complex datasets
d) big data

e) operations research

Ans: d
Response: See section 1.3 Introduction to Business Analytics
Difficulty: Medium
Learning Objective: 1.7: Compare and contrast the three categories of business analytics.

170. In order to help decision makers, business analytics uses a variety of techniques in order to _____ big data.
a) add value to
b) infer statistics from
c) graph information from
d) identify the data in
e) mine

Ans: a
Response: See section 1.3 Introduction to Business Analytics
Difficulty: Medium
Learning Objective: 1.7: Compare and contrast the three categories of business analytics.

171. Data are typically _____ by removing corrupt or incorrect records and identifying incomplete, incorrect, or irrelevant parts of data.
a) extracted
b) simulated
c) stratified
d) classified
e) cleaned

Ans: e
Response: See section 1.3 Introduction to Business Analytics
Difficulty: Medium
Learning Objective: 1.7: Compare and contrast the three categories of business analytics.

172. To improve usability and searchability, data are usually sorted into _____.
a) columns and rows
b) graphics and plots
c) bar graphs and charts
d) visualization and ranges
e) dots and lines

Ans: a
Response: See section 1.3 Introduction to Business Analytics

Difficulty: Medium
Learning Objective: 1.7: Compare and contrast the three categories of business analytics.

173. The final stage in the process of business analytics is _____.
a) visualization
b) simulated
c) prescriptive
d) graph driven
e) statistical

Ans: c
Response: See section 1.3 Introduction to Business Analytics
Difficulty: Medium
Learning Objective: 1.7: Compare and contrast the three categories of business analytics.

174. Statistics can generally be divided into the two branches of _____ and _____.
a) variety, velocity
b) nominal, ordinal
c) SAS, SPSS
d) descriptive, inferential
e) volume, veracity

Ans: d
Response: See section 1.3 Introduction to Business Analytics
Difficulty: Medium
Learning Objective: 1.7: Compare and contrast the three categories of business analytics.

175. Companies collect ~~terabyes~~terabytes of new data every day that are then added to its petabytes of historical data in order to _____.
a) have more data than competitors
b) see if it is possible
c) improve their security systems
d) fill data sets
e) help managers make better decisions

Ans: e
Response: See section 1.3 Introduction to Business Analytics
Difficulty: Medium
Learning Objective: 1.7: Compare and contrast the three categories of business analytics.

176. Data extraction is the first process within _____.
a) data visualization
b) data inferential analysis
c) frequency distribution
d) data mining
e) networking veracity

Ans: d
Response: See section 1.3 Introduction to Business Analytics
Difficulty: Medium
Learning Objective: 1.7: Compare and contrast the three categories of business analytics.

177. Which is considered the simplest and most commonly used of the categories of business analytics?
a) Descriptive analytics
b) Predictive analytics
c) Time series analytics
d) Theoretical analytics
e) Simulation analytics

Ans: a
Response: See section 1.3 Introduction to Business Analytics
Difficulty: Medium
Learning Objective: 1.7: Compare and contrast the three categories of business analytics.

178. What type of analytics strives to consider the risk of potential future decisions before they are made?
a) Network-series analytics
b) Communication analytics
c) Predictive analytics
d) Prescriptive analytics
e) Trend analytics

Ans: d
Response: See section 1.3 Introduction to Business Analytics
Difficulty: Medium
Learning Objective: 1.7: Compare and contrast the three categories of business analytics.

179. What type of analytics include classifying techniques, such as decision tree models and neural networks?
a) Trend analytics

b) Network-series analytics
c) Communication analytics
d) Predictive analytics
e) Prescriptive analytics

Ans: d
Response: See section 1.3 Introduction to Business Analytics
Difficulty: Medium
Learning Objective: 1.7: Compare and contrast the three categories of business analytics.

180. Data mining utilizes the ETL process. ETL stands for _____.
a) Elapsed, triangular, and logarithmic
b) Extracting, tableau, and logarithms
c) Excel, traditional, and linear
d) Exploring, trends, and location plotting
e) Extract, transform, and load

Ans: e
Response: See section 1.3 Introduction to Business Analytics
Difficulty: Medium
Learning Objective: 1.7: Compare and contrast the three categories of business analytics.