Student name:\_\_\_\_\_\_\_\_\_\_

1. Data analytics is the process of evaluating data with the purpose of drawing conclusions to address business questions.
* true
* false

1. The process of data analytics aims to transform raw information into data to create value.
* true
* false

1. Data analytics has the potential to transform the manner in which companies run their businesses, however it is not practical in the near future.
* true
* false

1. Auditors can use social media to hear what customers are saying about a company and compare this to inventory obsolescence and other estimates.
* true
* false

1. Data analytics allows auditors to glean insights that are beneficial to the client, without breeching independence.
* true
* false

1. The predictive analytics is an important aspect of data analytics for auditors, but is not applicable for tax accountants.
* true
* false

1. The I in IMPACT Cycle represents Identify the Question.
* true
* false

1. The M in IMPACT Cycle represents Master the Data.
* true
* false

1. The P in IMPACT Cycle represents Predict the Results.
* true
* false

1. The A in IMPACT Cycle represents Analyze the Data.
* true
* false

1. The C in IMPACT Cycle represents Continuously Track.
* true
* false

1. The T in IMPACT Cycle represents Track Outcomes.
* true
* false

1. The IMPACT cycle is iterative, as insights are gained, outcomes are tracked, and new questions are identified.
* true
* false

1. Data analysis through data manipulation is performing basic analysis to understand the quality of the underlying data and its ability to address the business question.
* true
* false

1. To be proficient in data analysis, accountants need to become data scientists.
* true
* false

1. By developing an analytics mindset, accountants will be able to recognize when and how data analytics can address business questions.
* true
* false

1. While it is important for accountants to clearly articulate the business problem, drawing appropriate conclusions, based on the data, should be left to statisticians.
* true
* false

1. Analytic-minded accountants should report results of analysis in an accessible way to each varied decision maker and their specific needs.
* true
* false

1. With a goal to give organizations the information they need to make sound and timely business decisions, data analytics often involves all of the following *except*:

technologies.

statistics.

strategies.

databases.

1. Patterns discovered from \_\_\_\_\_\_\_\_\_\_ enable businesses to identify opportunities and risks and better plan for \_\_\_\_\_\_\_\_\_\_.

past archives; the future

current data; the future

current data; today

past archives; today

1. Which of the following best describes the goal of descriptive data analysis:

recognize what is meant by data quality, be it completeness, reliability or validity

perform basic analysis to understand the quality of the underlying data and its ability to address the business question

demonstrate ability to sort, rearrange, merge, and reconfigure data in a manner that allows enhanced analysis

comprehend the process needed to clean and prepare the data before analysis

1. Which of the following Microsoft software tool specializes in data joining?

Excel

Power Query

Power BI

Power Automate

1. Which of the following Microsoft software tools specializes in creating dashboards?

Excel

Power Query

Power BI

Power Automate

1. Which of the following Tableau software tools specializes in data transformation?

Tableau Desktop

Tableau Prep Builder

Tableau Public

Tableau Visualize

1. Which of the following Tableau software tools specializes in creating dashboards?

Tableau Desktop

Tableau Prep Builder

Tableau Public

Tableau Visualize

1. Which of the following best describes the goal of data quality:

recognize what is meant by data quality, be it completeness, reliability or validity

perform basic analysis to understand the quality of the underlying data and its ability to address the business question

demonstrate ability to sort, rearrange, merge, and reconfigure data in a manner that allows enhanced analysis

comprehend the process needed to clean and prepare the data before analysis

1. Which of the following best describes the goal of data manipulation:

recognize what is meant by data quality, be it completeness, reliability or validity

perform basic analysis to understand the quality of the underlying data and its ability to address the business question

demonstrate ability to sort, rearrange, merge, and reconfigure data in a manner that allows enhanced analysis

comprehend the process needed to clean and prepare the data before analysis

1. Which of the following best describes the goal of data scrubbing and data preparation:

recognize what is meant by data quality, be it completeness, reliability or validity

perform basic analysis to understand the quality of the underlying data and its ability to address the business question

demonstrate ability to sort, rearrange, merge and reconfigure data in a manner that allows enhanced analysis

comprehend the process needed to clean and prepare the data before analysis

1. Which of the following best describes the goal of developing an analytics mindset:

recognize when and how data analytics can address business questions

perform basic analysis to understand the quality of the underlying data and its ability to address the business question

recognize what is meant by data quality, be it completeness, reliability or validity

comprehend the process needed to clean and prepare the data before analysis

1. Which of the following best describes the goal of data visualization and data reporting:

recognize when and how data analytics can address business questions

perform basic analysis to understand the quality of the underlying data and its ability to address the business question

recognize what is meant by data quality, be it completeness, reliability or validity

report results of analysis in an accessible way to each varied decision maker and their specific needs

1. Which of the following best describes the goal of defining and addressing problems through statistical data analysis:

recognize what is meant by data quality, be it completeness, reliability or validity

perform basic analysis to understand the quality of the underlying data and its ability to address the business question

demonstrate ability to sort, rearrange, merge and reconfigure data in a manner that allows enhanced analysis

identify and implement an approach that will use statistical data analysis to draw conclusions and make recommendations on a timely basis

1. While accountants don't need to become data scientists, they must know how to do the following *except*:

Clearly articulate the business problem the company is facing

Communicate with the data scientists about specific data needs and understand the underlying quality of the data

Build a data repository

Comprehend the process needed to clean and prepare the data before analysis

1. Data analytics professionals estimate that they spend between \_\_\_\_\_\_\_\_\_\_ of their time cleaning data so it can be analyzed.

50 percent and 90 percent

10 percent and 20 percent

20 percent and 50 percent

70 percent and 95 percent

1. Which approach to data analytics attempts to estimate or predict, for each unit, the numerical value of some variable using some type of statistical model?

Similarity matching.

Classification.

Data reduction.

Regression.

1. Which approach to data analytics attempts to characterize the typical behavior of an individual, group or population by generating summary statistics about the data?

Similarity matching.

Profiling.

Data reduction.

Regression.

1. Since some transactions need more attention than others, the data reduction approach would arguably be most important for the \_\_\_\_\_\_\_\_\_\_ function.

audit

tax.

management accounting.

Regression.

1. Which approach to data analytics attempts to reduce the amount of information that needs to be considered to focus on the most critical items?

Similarity matching.

Profiling.

Data reduction.

Regression.

1. Which of the following best describes the classification approach to data analytics?

An attempt to assign each unit (or individual) in a population into a few categories.

An attempt to identify similar individuals based on data known about them.

An attempt to divide individuals into groups in a useful or meaningful way.

An attempt to discover associations between individuals based on transactions involving them.

1. Which of the following best describes the clustering approach to data analytics?

An attempt to assign each unit (or individual) in a population into a few categories.

An attempt to identify similar individuals based on data known about them.

An attempt to divide individuals into groups in a useful or meaningful way.

An attempt to discover associations between individuals based on transactions involving them.

1. Which of the following best describes the similarity matching approach to data analytics?

An attempt to assign each unit (or individual) in a population into a few categories.

An attempt to identify similar individuals based on data known about them.

An attempt to divide individuals into groups in a useful or meaningful way.

An attempt to discover associations between individuals based on transactions involving them.

1. Which of the following best describes the regression approach to data analytics?

An attempt to estimate or predict, for each unit, the numerical value of some variable using some type of statistical model.

An attempt to predict a relationship between two data items.

An attempt to divide individuals into groups in a useful or meaningful way.

An attempt to discover associations between individuals based on transactions involving them.

1. Which of the following best describes the co-occurrence grouping approach to data analytics?

An attempt to characterize the typical behavior of an individual, group or population by generating summary statistics about the data.

An attempt to predict a relationship between two data items.

An attempt to reduce the amount of information that needs to be considered to focus on the most critical items.

An attempt to discover associations between individuals based on transactions involving them.

1. Which of the following best describes the link prediction approach to data analytics?

An attempt to characterize the typical behavior of an individual, group or population by generating summary statistics about the data.

An attempt to predict a relationship between two data items.

An attempt to reduce the amount of information that needs to be considered to focus on the most critical items.

An attempt to discover associations between individuals based on transactions involving them.

1. Which of the following best describes the profiling approach to data analytics?

An attempt to characterize the typical behavior of an individual, group or population by generating summary statistics about the data.

An attempt to predict a relationship between two data items.

An attempt to reduce the amount of information that needs to be considered to focus on the most critical items.

An attempt to discover associations between individuals based on transactions involving them.

1. Which of the following best describes the data reduction approach to data analytics?

An attempt to characterize the typical behavior of an individual, group or population by generating summary statistics about the data.

An attempt to predict a relationship between two data items.

An attempt to reduce the amount of information that needs to be considered to focus on the most critical items.

An attempt to discover associations between individuals based on transactions involving them.

1. Which approach to data analytics attempts to discover associations between individuals based on transactions involving them?

Similarity matching.

Clustering.

Co-occurrence grouping.

Link prediction.

1. Which approach to data analytics attempts to identify similar individuals based on data known about them?

Similarity matching.

Clustering.

Co-occurrence grouping.

Link prediction.

1. Which approach to data analytics attempts to predict a relationship between two data items?

Similarity matching.

Clustering.

Co-occurrence grouping.

Link prediction.

1. Which approach to data analytics attempts to divide individuals into groups in a useful or meaningful way?

Similarity matching.

Clustering.

Co-occurrence grouping.

Link prediction.

1. The IMPACT cycle includes all the following processes *except*:

Identify the questions.

Address and refine results.

Track outcomes.

Predict the results.

1. One of the most important aspects of data analytics that impacts tax is:

predictive analytics.

co-occurrence grouping.

similarity matching.

data quality.

1. If we are predicting which companies go bankrupt, bankruptcy would be the

dependent variable

independent variable

explanatory variable

classification variable

1. If a bank uses credit risk score to determine who will receive a loan, the credit risk score would be considered the:

dependent variable

independent variable

response variable

classification variable

1. If a bank uses credit risk score to determine who will receive a loan, the variable predicting who will receive a loan would be considered the:

dependent variable

independent variable

determinant variable

classification variable

1. The 4V’s of Big Data include all but the following:

volatility

variety

velocity

veracity

1. A recent study from McKinsey Global Institute estimates that Data Analytics could generate up to $2 \_\_\_\_\_\_\_\_\_\_ in value.

billion

trillion

million

thousand

1. The PwC’s 6th Annual Digital IQ survey of more than 1,400 leaders from digital business, the area of investment that tops CEOs’ list of priorities is:

information technology

capital expenditures including hardware and software

accounting data analytics

business analytics

1. According to PwC’s 18th Annual Global CEO survey, \_\_\_\_\_\_\_\_\_\_ percent of chief executive officers put a high value on data analytics.

95

86

55

35

1. According to the text, as the debt-to-income ratio increases, there is \_\_\_\_\_\_\_\_\_\_ chance of a loan getting rejected by the bank.

a greater

a lesser

no effect on the

1. According to the text, as the length of employment increases, there is \_\_\_\_\_\_\_\_\_\_ chance of a loan getting rejected by the bank.

a greater

a lesser

no effect on the

1. According to the text, as the credit score increases, there is \_\_\_\_\_\_\_\_\_\_ chance of a loan getting rejected by the bank.

a greater

a lesser

no effect on the

1. In the LendingClub dataset, a credit score is synonymous with:

a debt score.

a risk score.

a credit card score.

a premium score.

1. List and describe the eight (8) different approaches to data analytics.

1. List and explain four (4) of the seven (7) data analytic skills needed by analytic-minded accountants:

1. As more and more data are available, some would argue that the role of accounting is changing. While accountants don't need to become data scientists, they must develop a base level skill set. Whether they are the Director of Tax for Hewlett Packard or their external auditor, which basic skills are needed by an analytic-minded accountant?

1. What is the regression approach? How might the regression approach be used in auditing?

1. Assume that you have just started a new job as a credit manager for a Fortune 500 company. Using all steps in the IMPACT Cycle, provide examples of tasks that would be performed as part of each step and state the information/data you would need to make a decision if a customer is credit worthy.

**Answer Key**Test name: chapter 1

TRUE

FALSE

FALSE

TRUE

TRUE

FALSE

TRUE

TRUE

FALSE

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FALSE

TRUE

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FALSE

TRUE

C

A

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B

B

Essay

Essay

Essay

Essay

Essay