

## 1. Award: 10.00 points

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

- ☒ True  
☐ False

### References

True / False

Difficulty: 1 Easy

Learning Objective: 01-01 Define Data Analytics.

## 2. Award: 10.00 points

The process of data analytics aims to transform raw information into data to create value.

- ☐ True  
→ ☒ False

### References

True / False

Difficulty: 1 Easy

Learning Objective: 01-01 Define Data Analytics.

## 3. Award: 10.00 points

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

### References

True / False

Difficulty: 1 Easy

Learning Objective: 01-02 Understand why Data Analytics matters to business.

4. Award: 10.00 points

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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

References

True / False

Difficulty: 2 Medium

Learning Objective: 01-03 Explain why Data Analytics matters to accountants.

5. Award: 10.00 points

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Data analytics allows auditors to glean insights that are beneficial to the client, without breaching independence.

- ☒ True  
☐ False

References

True / False

Difficulty: 2 Medium

Learning Objective: 01-03 Explain why Data Analytics matters to accountants.

6. Award: 10.00 points

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

- ☐ True  
→ ☒ False

References

True / False

Difficulty: 1 Easy

Learning Objective: 01-03 Explain why Data Analytics matters to accountants.

7.

Award: 10.00 points

The I in IMPACT Cycle represents Identify the Question.

- ☒ True
- ☐ False

#### References

True / False

Difficulty: 2 Medium

Learning Objective: 01-04 Describe the Data Analytics Process Using the IMPACT Cycle.

8.

Award: 10.00 points

The M in IMPACT Cycle represents Master the Data.

- ☒ True
- ☐ False

#### References

True / False

Difficulty: 2 Medium

Learning Objective: 01-04 Describe the Data Analytics Process Using the IMPACT Cycle.

9.

Award: 10.00 points

The P in IMPACT Cycle represents Predict the Results.

- ☐ True
- ☒ False

#### References

True / False

Difficulty: 2 Medium

Learning Objective: 01-04 Describe the Data Analytics Process Using the IMPACT Cycle.

## 10. Award: 10.00 points

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The A in IMPACT Cycle represents Analyze the Data.

- ☐ True
- ☒ False

### References

True / False

Difficulty: 2 Medium

Learning Objective: 01-04 Describe the Data Analytics Process Using the IMPACT Cycle.

## 11. Award: 10.00 points

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The C in IMPACT Cycle represents Continuously Track.

- ☐ True
- ☒ False

### References

True / False

Difficulty: 2 Medium

Learning Objective: 01-04 Describe the Data Analytics Process Using the IMPACT Cycle.

## 12. Award: 10.00 points

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The T in IMPACT Cycle represents Track Outcomes.

- ☒ True
- ☐ False

### References

True / False

Difficulty: 2 Medium

Learning Objective: 01-04 Describe the Data Analytics Process Using the IMPACT Cycle.

### 13. Award: 10.00 points

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

- ☒ True  
☐ False

#### References

True / False

Difficulty: 1 Easy

Learning Objective: 01-04 Describe the Data Analytics Process Using the IMPACT Cycle.

### 14. Award: 10.00 points

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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

#### References

True / False

Difficulty: 2 Medium

Learning Objective: 01-05 Describe the Skills Needed by Accountants.

### 15. Award: 10.00 points

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To be proficient in data analysis, accountants need to become data scientists.

- ☐ True  
→ ☒ False

#### References

True / False

Difficulty: 1 Easy

Learning Objective: 01-05 Describe the Skills Needed by Accountants.

16. Award: 10.00 points

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

- ☒ True  
☐ False

References

True / False

Difficulty: 1 Easy

Learning Objective: 01-05 Describe the Skills Needed by Accountants.

17. Award: 10.00 points

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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

References

True / False

Difficulty: 2 Medium

Learning Objective: 01-05 Describe the Skills Needed by Accountants.

18. Award: 10.00 points

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

- ☒ True  
☐ False

References

True / False

Difficulty: 1 Easy

Learning Objective: 01-05 Describe the Skills Needed by Accountants.

19. Award: 10.00 points

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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.

References

Multiple Choice

Difficulty: 1 Easy

Learning Objective: 01-01 Define Data Analytics.

20. Award: 10.00 points

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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

References

Multiple Choice

Difficulty: 2 Medium

Learning Objective: 01-02 Understand why Data Analytics matters to business.

21. Award: 10.00 points

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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

References

Multiple Choice

Difficulty: 2 Medium

Learning Objective: 01-05 Describe the Skills Needed by Accountants.

## 22. Award: 10.00 points

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

- ☐ Excel
- ☒ Power Query
- ☐ Power BI
- ☐ Power Automate

### References

Multiple Choice

Difficulty: 2 Medium

Learning Objective: 01-05 Describe the Skills Needed by Accountants.

## 23. Award: 10.00 points

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

- ☐ Excel
- ☐ Power Query
- ☒ Power BI
- ☐ Power Automate

### References

Multiple Choice

Difficulty: 2 Medium

Learning Objective: 01-05 Describe the Skills Needed by Accountants.

## 24. Award: 10.00 points

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

- ☐ Tableau Desktop
- ☒ Tableau Prep Builder
- ☐ Tableau Public
- ☐ Tableau Visualize

### References

Multiple Choice

Difficulty: 2 Medium

Learning Objective: 01-05 Describe the Skills Needed by Accountants.



25. Award: 10.00 points

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

- ☒ Tableau Desktop
- ☐ Tableau Prep Builder
- ☐ Tableau Public
- ☐ Tableau Visualize

#### References

Multiple Choice

Difficulty: 2 Medium

Learning Objective: 01-05 Describe the Skills Needed by Accountants.

26. Award: 10.00 points

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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

#### References

Multiple Choice

Difficulty: 2 Medium

Learning Objective: 01-05 Describe the Skills Needed by Accountants.

27. Award: 10.00 points

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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

#### References

Multiple Choice

Difficulty: 2 Medium

Learning Objective: 01-05 Describe the Skills Needed by Accountants.

28. Award: 10.00 points

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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

References

Multiple Choice

Difficulty: 2 Medium

Learning Objective: 01-05 Describe the Skills Needed by Accountants.

29. Award: 10.00 points

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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

References

Multiple Choice

Difficulty: 2 Medium

Learning Objective: 01-05 Describe the Skills Needed by Accountants.

30. Award: 10.00 points

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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

References

Multiple Choice

Difficulty: 2 Medium

Learning Objective: 01-05 Describe the Skills Needed by Accountants.

### 31. Award: 10.00 points

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

#### References

Multiple Choice

Difficulty: 2 Medium

Learning Objective: 01-05 Describe the Skills Needed by Accountants.

### 32. Award: 10.00 points

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

#### References

Multiple Choice

Difficulty: 2 Medium

Learning Objective: 01-05 Describe the Skills Needed by Accountants.

### 33. Award: 10.00 points

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

#### References

Multiple Choice

Difficulty: 1 Easy

Learning Objective: 01-05 Describe the Skills Needed by Accountants.

### 34. Award: 10.00 points

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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.

#### References

Multiple Choice

Difficulty: 2 Medium

Learning Objective: 01-04 Describe the Data Analytics Process Using the IMPACT Cycle.

### 35. Award: 10.00 points

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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.

#### References

Multiple Choice

Difficulty: 2 Medium

Learning Objective: 01-04 Describe the Data Analytics Process Using the IMPACT Cycle.

### 36. Award: 10.00 points

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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.

#### References

Multiple Choice

Difficulty: 2 Medium

Learning Objective: 01-04 Describe the Data Analytics Process Using the IMPACT Cycle.

### 37. Award: 10.00 points

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.

#### References

Multiple Choice

Difficulty: 2 Medium

Learning Objective: 01-04 Describe the Data Analytics Process Using the IMPACT Cycle.

### 38. Award: 10.00 points

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.

#### References

Multiple Choice

Difficulty: 2 Medium

Learning Objective: 01-04 Describe the Data Analytics Process Using the IMPACT Cycle.

### 39. Award: 10.00 points

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.

#### References

Multiple Choice

Difficulty: 3 Hard

Learning Objective: 01-04 Describe the Data Analytics Process Using the IMPACT Cycle.

40. Award: 10.00 points

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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.

References

Multiple Choice

Difficulty: 3 Hard

Learning Objective: 01-04 Describe the Data Analytics Process Using the IMPACT Cycle.

41. Award: 10.00 points

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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.

References

Multiple Choice

Difficulty: 3 Hard

Learning Objective: 01-04 Describe the Data Analytics Process Using the IMPACT Cycle.

42. Award: 10.00 points

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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.

References

Multiple Choice

Difficulty: 2 Medium

Learning Objective: 01-04 Describe the Data Analytics Process Using the IMPACT Cycle.

43. Award: 10.00 points

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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.

References

Multiple Choice

Difficulty: 2 Medium

Learning Objective: 01-04 Describe the Data Analytics Process Using the IMPACT Cycle.

44. Award: 10.00 points

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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.

References

Multiple Choice

Difficulty: 2 Medium

Learning Objective: 01-04 Describe the Data Analytics Process Using the IMPACT Cycle.

45. Award: 10.00 points

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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.

References

Multiple Choice

Difficulty: 2 Medium

Learning Objective: 01-04 Describe the Data Analytics Process Using the IMPACT Cycle.

46. Award: 10.00 points

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

- ☐ Similarity matching.
- ☐ Clustering.
- ☒ Co-occurrence grouping.
- ☐ Link prediction.

#### References

Multiple Choice

Difficulty: 2 Medium

Learning Objective: 01-04 Describe the Data Analytics Process Using the IMPACT Cycle.

47. Award: 10.00 points

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

- ☒ Similarity matching.
- ☐ Clustering.
- ☐ Co-occurrence grouping.
- ☐ Link prediction.

#### References

Multiple Choice

Difficulty: 2 Medium

Learning Objective: 01-04 Describe the Data Analytics Process Using the IMPACT Cycle.

48. Award: 10.00 points

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

- ☐ Similarity matching.
- ☐ Clustering.
- ☐ Co-occurrence grouping.
- ☒ Link prediction.

#### References

Multiple Choice

Difficulty: 2 Medium

Learning Objective: 01-04 Describe the Data Analytics Process Using the IMPACT Cycle.



49. Award: 10.00 points

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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.

#### References

Multiple Choice

Difficulty: 2 Medium

Learning Objective: 01-04 Describe the Data Analytics Process Using the IMPACT Cycle.

50. Award: 10.00 points

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

- ☐ Identify the questions.
- ☐ Address and refine results.
- ☐ Track outcomes.
- ☒ Predict the results.

#### References

Multiple Choice

Difficulty: 2 Medium

Learning Objective: 01-04 Describe the Data Analytics Process Using the IMPACT Cycle.

51. Award: 10.00 points

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

- ☒ predictive analytics.
- ☐ co-occurrence grouping.
- ☐ similarity matching.
- ☐ data quality.

#### References

Multiple Choice

Difficulty: 2 Medium

Learning Objective: 01-03 Explain why Data Analytics matters to accountants.

52. Award: 10.00 points

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

- ☒ dependent variable
- ☐ independent variable
- ☐ explanatory variable
- ☐ classification variable

#### References

Multiple Choice

Difficulty: 2 Medium

Learning Objective: 01-04 Describe the Data Analytics Process Using the IMPACT Cycle.

53. Award: 10.00 points

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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

#### References

Multiple Choice

Difficulty: 2 Medium

Learning Objective: 01-04 Describe the Data Analytics Process Using the IMPACT Cycle.

54. Award: 10.00 points

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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

#### References

Multiple Choice

Difficulty: 2 Medium

Learning Objective: 01-04 Describe the Data Analytics Process Using the IMPACT Cycle.

55. Award: 10.00 points

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The 4V's of Big Data include all but the following:

- ☒ volatility
- ☐ variety
- ☐ velocity
- ☐ veracity

#### References

Multiple Choice

Difficulty: 2 Medium

Learning Objective: 01-01 Define Data Analytics.

56. Award: 10.00 points

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

- ☐ billion
- ☒ trillion
- ☐ million
- ☐ thousand

#### References

Multiple Choice

Difficulty: 2 Medium

Learning Objective: 01-02 Understand why Data Analytics matters to business.

57. Award: 10.00 points

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The PwC's 6<sup>th</sup> 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

#### References

Multiple Choice

Difficulty: 2 Medium

Learning Objective: 01-02 Understand why Data Analytics matters to business.

58. Award: 10.00 points

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According to PwC's 18<sup>th</sup> Annual Global CEO survey, \_\_\_\_\_ percent of chief executive officers put a high value on data analytics.

- ☐ 95
- ☒ 86
- ☐ 55
- ☐ 35

#### References

Multiple Choice

Difficulty: 2 Medium

Learning Objective: 01-02 Understand why Data Analytics matters to business.

59. Award: 10.00 points

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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

#### References

Multiple Choice

Difficulty: 2 Medium

Learning Objective: 01-06 Explain how the IMPACT model may be used to address a specific business question.

60. Award: 10.00 points

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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

#### References

Multiple Choice

Difficulty: 2 Medium

Learning Objective: 01-06 Explain how the IMPACT model may be used to address a specific business question.

## 61. Award: 10.00 points

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

### References

Multiple Choice

Difficulty: 2 Medium

Learning Objective: 01-06 Explain how the IMPACT model may be used to address a specific business question.

## 62. Award: 10.00 points

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

- ☐ a debt score.
- ☒ a risk score.
- ☐ a credit card score.
- ☐ a premium score.

### References

Multiple Choice

Difficulty: 2 Medium

Learning Objective: 01-06 Explain how the IMPACT model may be used to address a specific business question.

## 63. Award: 10.00 points

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

Answers may vary slightly!

- Classification — An attempt to assign each unit (or individual) in a population into a few categories.
- Regression — An attempt to estimate or predict, for each unit, the numerical value of some variable using some type of statistical model.
- Similarity matching — An attempt to identify similar individuals based on data known about them.
- Clustering — An attempt to divide individuals (like customers) into groups (or clusters) in a useful or meaningful way.
- Co-occurrence grouping — An attempt to discover associations between individuals based on transactions involving them.
- Profiling — An attempt to characterize the "typical" behavior of an individual, group or population by generating summary statistics about the data (including mean, standard deviations, etc.).
- Link prediction — An attempt to predict a relationship between two data items.
- Data reduction — A data approach that attempts to reduce the amount of information that needs to be considered to focus on the most critical items (i.e., highest cost, highest risk, largest IMPACT, etc.).

### References

Essay

Difficulty: 3 Hard

Learning Objective: 01-01 Define Data Analytics.

## 64. Award: 10.00 points

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

Answers will vary but should include some of these items.

- Developing an analytics mindset — recognize when and how data analytics can address business questions.
- Data scrubbing and data preparation — comprehend the process needed to clean and prepare the data before analysis.
- Data quality — recognize what is meant by data quality, be it completeness, reliability or validity.
- Descriptive data analysis — perform basic analysis to understand the quality of the underlying data and its ability to address the business question.
- Data analysis through data manipulation — demonstrate ability to sort, rearrange, merge and reconfigure data in a manner that allows enhanced analysis.
- Defining and addressing problems through statistical data analysis — identify and implement an approach that will use statistical data analysis to draw conclusions and make recommendations on a timely basis.
- Data visualization and data reporting — report results of analysis in an accessible way to each varied decision maker and their specific needs.

### References

Essay

Difficulty: 3 Hard

Learning Objective: 01-05 Describe the Skills Needed by Accountants.

## 65. Award: 10.00 points

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?

Answers will vary!

- 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.
- Draw appropriate conclusions to the business problem based on the data and make recommendations on a timely basis, and
- Present their results to individual members of management (CEOs, audit managers, etc.) in an accessible manner to each member.

### References

Essay

Difficulty: 3 Hard

Learning Objective: 01-05 Describe the Skills Needed by Accountants.

## 66. Award: 10.00 points

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

Answers will vary!

Regression is an attempt to estimate or predict, for each unit, the numerical value of some variable using some type of statistical model. Given a balance of total accounts receivable held by a client, auditors can use a regression analysis to estimate the appropriate level of allowance for doubtful accounts for bad debts.

### References

Essay

Difficulty: 3 Hard

Learning Objective: 01-05 Describe the Skills Needed by Accountants.

## 67. Award: 10.00 points

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.

Answers will vary! A potential answer might include:

Process:	Example or Information need:
Identify the Question	Who is the customer? What is the credit amount requested? What are the terms of payment? How is their financial performance, relative to their competitors?
Master the Data	What is their: <ul style="list-style-type: none"><li>• Liquidity ratio,</li><li>• Effectiveness or turnover ratios,</li><li>• Financial leverage ratios,</li><li>• Profitability ratios,</li><li>• Ratios of debt service.</li></ul>
Perform Test Plan	Possible approaches <ul style="list-style-type: none"><li>• Regression</li><li>• Profiling</li><li>• Data reduction</li></ul>
Address and Refine Results	<ul style="list-style-type: none"><li>• Examine correlations</li><li>• Request additional data</li><li>• Discuss with colleagues</li><li>• Rerun analysis</li></ul>
Communicate Insights	Provide answer (yes/no) to customer. If yes, provide amount of credit limit and payment terms.
Track Outcomes	<ul style="list-style-type: none"><li>• Monitor customer aging and payment trends</li><li>• Revisit as necessary</li></ul>

### References

Essay

Difficulty: 3 Hard

Learning Objective: 01-06 Explain how the IMPACT model may be used to address a specific business question.