Try again once you are ready
Grade received 79%
To pass 80% or higher
Try again

The following questions are designed to help you assess your comfort level with general data analytics principles and data types. Use them to self-reflect and make your own decisions about the foundational knowledge you need to be successful in this course.

1. What is data science? 0 / 1 point

- ○ A process used to solve complex problems in a user-centric way
- ◉ The collection, transformation, and organization of data in order to draw conclusions, make predictions, and drive informed decision-making
- ○ A tool for organizing data elements and how they relate to one another
- ○ A field of study that uses raw data to create new ways of modeling and understanding the unknown

⊗ Incorrect
Data science is a field of study that uses raw data to create new ways of modeling and understanding the unknown. To learn about data science, enroll in the Google Data Analytics Certificate.

2. What is the key difference between qualitative and quantitative data? 1 / 1 point

- ◉ Qualitative data measures qualities and characteristics; quantitative data measures numerical facts.
- ○ Qualitative data is about the quality of a product or service; quantitative data is about how much of that product or service is available in the marketplace.
- ○ Qualitative data is subjective; quantitative data is specific.
- ○ Qualitative data describes the kind of data being analyzed; quantitative data describes how much data is being analyzed.

✓ Correct
Qualitative data measures qualities and characteristics; quantitative data measures numerical facts.

3. Which of the following statements accurately describe wide and long data? Select all that apply. 0 / 1 point

- ☑ Wide data subjects can have data in multiple columns.

✓ Correct
Wide data subjects can have data in multiple columns. Long data subjects can have multiple rows that hold the values of subject attributes.

- ☑ Wide data subjects can have multiple rows that hold the values of subject attributes.

This should not be selected
Wide data subjects can have data in multiple columns. Long data subjects can have multiple rows that hold the values of subject attributes. To learn about data types, enroll in the Google Data Analytics Certificate.

- [x] Long data subjects can have data in multiple columns.

This should not be selected
Wide data subjects can have data in multiple columns. Long data subjects can have multiple rows that hold the values of subject attributes. To learn about data types, enroll in the Google Data Analytics Certificate.

- [x] Long data subjects can have multiple rows that hold the values of subject attributes.

Correct
Wide data subjects can have data in multiple columns. Long data subjects can have multiple rows that hold the values of subject attributes.

4. Structured data is likely to be found in which of the following formats? Select all that apply. 0.5 / 1 point

- [x] Digital photo

This should not be selected
Structured data is organized in a certain format such as rows and columns. It is likely to be found in a table or spreadsheet. To learn about structured data, enroll in the Google Data Analytics Certificate.

- [x] Spreadsheet

Correct
Structured data is organized in a certain format such as rows and columns. It is likely to be found in a table or spreadsheet. To learn about structured data, enroll in the Google Data Analytics Certificate.

- [x] Database table

Correct
Structured data is organized in a certain format such as rows and columns. It is likely to be found in a table or spreadsheet. To learn about structured data, review course three of the Google Data Analytics Certificate.

- [x] Audio file

This should not be selected
Structured data is organized in a certain format such as rows and columns. It is likely to be found in a table or spreadsheet. To learn about structured data, enroll in the Google Data Analytics Certificate.

5. Fill in the blank: A Boolean data type can have _____ possible value(s). 1 / 1 point

- ○ infinite
- ○ one
- ○ three
- ◉ two

✓ Correct
A Boolean data type can have two possible values.

The following questions are designed to help you assess your comfort level with data strategy. Use them to self-reflect and make your own decisions about the foundational knowledge you need to be successful in this course.

6. What is the term for the individuals who have invested time and resources in a project and are interested in its outcome? 1 / 1 point

- ○ Subject-matter experts
- ○ Executives
- ○ Project sponsors
- ◉ Stakeholders

✓ Correct
Stakeholders are individuals who have invested time and resources in a project and are interested in its outcome.

7. When collecting data for a study, what are some reasons to consider sample size? Select all that apply. 0.5 / 1 point

- ☑ To make sure a few unusual responses don't skew results

✓ Correct
Considering sample size ensures the data represents a diverse set of perspectives and helps avoid skewed results or inaccurate judgements.

- ☑ To collect data that represents a diverse set of perspectives

✓ Correct
Considering sample size ensures the data represents a diverse set of perspectives and helps avoid skewed results or inaccurate judgements.

- ☑ To include as many participants as possible in the study

✗ This should not be selected

Considering sample size ensures the data represents a diverse set of perspectives and helps avoid skewed results or inaccurate judgements. To learn about sample size, enroll in the Google Data Analytics Certificate.

- [x] To eliminate certain segments of a population

⊗ This should not be selected
Considering sample size ensures the data represents a diverse set of perspectives and helps avoid skewed results or inaccurate judgements. To learn about sample size, enroll in the Google Data Analytics Certificate.

8. The SMART methodology can be used to ask a question that promotes change. What type of SMART question leads to change? 1 / 1 point

- ○ Results-focused
- ○ Transformational
- ◉ Action-oriented
- ○ Motivational

✓ Correct
A SMART question that promotes change is action-oriented.

9. Which of the following inquiries are leading questions? Select all that apply. 0.75 / 1 point

- [x] How did you learn about our company?

⊗ This should not be selected
Leading questions include: How satisfied were you with our customer representative? In what ways did our product meet your needs? And what do you enjoy most about our service? Leading questions direct the respondent to a particular answer, often because they suggest the answer within the question. To learn about leading questions, enroll in the Google Data Analytics Certificate.

- [x] In what ways did our product meet your needs?

✓ Correct
Leading questions include: How satisfied were you with our customer representative? In what ways did our product meet your needs? And what do you enjoy most about our service? Leading questions direct the respondent to a particular answer, often because they suggest the answer within the question.

- [x] What do you enjoy most about our service?

✓ Correct
Leading questions include: How satisfied were you with our customer representative? In what ways did our product meet your needs? And what do you enjoy most about our service? Leading questions direct the respondent to a particular answer, often because they suggest the answer within the question.

- [x] How satisfied were you with our customer representative?

Correct
Leading questions include: How satisfied were you with our customer representative? In what ways did our product meet your needs? And what do you enjoy most about our service? Leading questions direct the respondent to a particular answer, often because they suggest the answer within the question.

10. What are the key characteristics of a metric? Select all that apply. 0.75 / 1 point

- [x] Metrics are unorganized collections of facts.

This should not be selected
Metrics are quantifiable data types used for measurement and performance evaluation. To learn about metrics, enroll in the Google Data Analytics Certificate.

- [x] Metrics can be used to evaluate performance.

Correct
Metrics are quantifiable data types used for measurement and performance evaluation.

- [x] Metrics are quantifiable.

Correct
Metrics are quantifiable data types used for measurement and performance evaluation.

- [x] Metrics are used for measurement.

Correct
Metrics are quantifiable data types used for measurement and performance evaluation.

The following questions are designed to help you assess your comfort level with data integrity and data cleaning. Use them to self-reflect and make your own decisions about the foundational knowledge you need to be successful in this course.

11. Which type of bias is the tendency to construe ambiguous situations in a positive or negative way? 1 / 1 point

- ○ Observer bias
- ○ Confirmation bias
- ◉ Interpretation bias
- ○ Cultural bias

Correct

Interpretation bias is the tendency to construe ambiguous situations in a positive or negative way.

12. Before completing a survey, an individual acknowledges reading information about how and why the data they provide will be used. What concept does this describe? 1 / 1 point

- ○ Privacy
- ○ Transaction transparency
- ◉ Consent
- ○ Openness

✓ Correct
This concept is called consent. Consent is the aspect of data ethics that presumes an individual's right to know how and why their personal data will be used before agreeing to provide it.

13. Which spreadsheet tool changes how cells appear when values meet a specific condition? 1 / 1 point

- ○ Alternating colors
- ◉ Conditional formatting
- ○ Data validation
- ○ Protected ranges

✓ Correct
Conditional formatting is the spreadsheet tool that changes how cells appear when values meet a specific condition.

14. Fill in the blank: In a spreadsheet, the SPLIT function divides a text string around a ___, then puts each fragment into a new, separate cell. 1 / 1 point

- ◉ delimiter
- ○ indicator
- ○ substring
- ○ mark

✓ Correct
In a spreadsheet, the SPLIT function divides a text string around a delimiter, then puts each fragment into a new, separate cell.

The following questions are designed to help you assess your comfort level with programming languages. Use them to self-reflect and make your own decisions about the foundational knowledge you need to be successful in this course.

15. Fill in the blank: A programming language is a system of words and symbols used to _____ for computers. 1 / 1 point

- ○ repair infrastructure
- ◉ write instructions
- ○ detect malware
- ○ install hardware

✓ Correct
A programming language is a system of words and symbols used to write instructions for computers.

16. What are the main benefits of using a programming language to work with data? Select all that apply. 0.75 / 1 point

- ☑ Clarify the steps of analysis

✓ Correct
There are three main benefits of using a programming language to work with data: Easily reproduce and share work, save time, and clarify the steps of analysis.

- ☑ Easily reproduce and share work

✓ Correct
There are three main benefits of using a programming language to work with data: Easily reproduce and share work, save time, and clarify the steps of analysis.

- ☑ Save time

✓ Correct
There are three main benefits of using a programming language to work with data: Easily reproduce and share work, save time, and clarify the steps of analysis.

- ☑ Automate decision-making

✗ This should not be selected
There are three main benefits of using a programming language to work with data: Easily reproduce and share work, save time, and clarify the steps of analysis. To learn about programming languages, enroll in the Google Data Analytics Certificate.

17. In order for code to work properly, it's necessary to follow the predetermined structure of the coding language. This includes all required words and symbols, as well as their proper placement. What is this structure called? 1 / 1 point

- (●) Syntax
- ( ) Standard
- ( ) Script
- ( ) Symbol

Correct
In order for code to work properly, it's necessary to follow the syntax of the coding language. This includes all required words and symbols, as well as their proper placement.

18. What is the term for programming code that is freely available and may be modified and shared by the people who use it? 1 / 1 point

- (●) Open-source
- ( ) Common-design
- ( ) One-access
- ( ) Non-dependant

Correct
Open-source code is freely available and may be modified and shared by the people who use it.

19. Data professionals use programming languages to enable which of the following? Select all that apply. 0 / 1 point

- [x] Data transformation

Correct
Data professionals use programming languages to enable data transformation, cleaning, and visualization.

- [x] Data cleaning

Correct
Data professionals use programming languages to enable data transformation, cleaning, and visualization.

- [x] Data visualization

Correct
Data professionals use programming languages to enable data transformation, cleaning, and visualization.

- [x] Data governance

⊗ This should not be selected
Data professionals use programming languages to enable data transformation, cleaning, and visualization. To learn about programming languages, enroll in the Google Data Analytics Certificate.

The following questions are designed to help you assess your comfort level with data visualization, dashboards, and sharing insights with others. Use them to self-reflect and make your own decisions about the foundational knowledge you need to be successful in this course.

20. What type of data visualization should be used to demonstrate how often data values fall into certain ranges? 1 / 1 point

- ○ Bar chart
- ◉ Histogram
- ○ Correlation chart
- ○ Tree map

✓ Correct
To demonstrate how often data values fall into certain ranges, use a histogram.

21. A dashboard is designed to share insights about the housing market in a city. What type of data visualization would be most effective at demonstrating how the city's annual home sales have risen over time? 1 / 1 point

- ○ Pie chart
- ○ Area chart
- ○ Scatter plot
- ◉ Line chart

✓ Correct
To demonstrate how the city's annual home sales have risen over time, a line chart would be most effective.

22. What type of visualizations enable the data in a presentation to automatically update and change over time? 1 / 1 point

- ○ Discrete
- ○ Customized
- ◉ Dynamic
- ○ Static

Correct
Dynamic visualizations enable the data in a presentation to automatically update and change over time.

23. Why is it more effective to label a data visualization instead of using a legend? Select all that apply. 0.75 / 1 point

- [x] Labels allow for text explanations to be placed directly on the visualization.

Correct
It is more effective to label a data visualization instead of using a legend for several reasons: Labels can be placed near the data, they make the data visualization more accessible, and they allow for text explanations to be placed directly on the visualization.

- [x] Labels help keep people's attention on relevant data by redirecting their focus away from outliers.

This should not be selected
It is more effective to label a data visualization instead of using a legend for several reasons: Labels can be placed near the data, they make the data visualization more accessible, and they allow for text explanations to be placed directly on the visualization. To learn about data visualization best practices, enroll in the Google Data Analytics Certificate.

- [x] Labels can be placed near the data, whereas legends are typically positioned away from the data.

Correct
It is more effective to label a data visualization instead of using a legend for several reasons: Labels can be placed near the data, they make the data visualization more accessible, and they allow for text explanations to be placed directly on the visualization.

- [x] Labels make the data visualization more accessible because they don't rely on the ability to interpret color.

Correct
It is more effective to label a data visualization instead of using a legend for several reasons: Labels can be placed near the data, they make the data visualization more accessible, and they allow for text explanations to be placed directly on the visualization.

24. A data visualization reveals two variables in the data that rise and fall at the same time. When variables are related in this way, what is likely happening? 1 / 1 point

- ○ Divergence
- ◉ Correlation
- ○ Causation
- ○ Polarity

Correct

When two variables in a visualization rise and fall at the same time, this is an example of correlation. Correlation is the measure of the degree to which two variables change in relationship to each other.

25. Which of the following are appropriate uses for filters in data visualization tools? Select all that apply. 0.75 / 1 point

- [x] Providing data to different users based on their particular needs

  Correct
  Filters can be used to highlight individual data points, limit the number of rows or columns in view, and provide data to different users based on their needs.

- [x] Hiding outliers that do not support the hypothesis

  This should not be selected
  Filters can be used to highlight individual data points, limit the number of rows or columns in view, and provide data to different users based on their needs. To learn about filtering in data visualizations, enroll in the Google Data Analytics Certificate.

- [x] Highlighting individual data points

  Correct
  Filters can be used to highlight individual data points, limit the number of rows or columns in view, and provide data to different users based on their needs.

- [x] Limiting the number of rows or columns in view

  Correct
  Filters can be used to highlight individual data points, limit the number of rows or columns in view, and provide data to different users based on their needs.