1. A data analyst is tasked with creating a visualization. What process can they use to understand the dataset's structure?

- ✅ **Data exploration**
  🟦 *Data exploration involves inspecting the dataset's characteristics (size, distribution, accuracy) to understand its structure before visualization.*

- ❌ Data presentation

- ❌ Data visualization

- ❌ Data discovery

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2. As a cloud data analyst, what type of questions can you answer using measures?

- ✅ **Questions that require a mathematical operation of the dimensions, such as average, count, and sum**
  🟦 *Measures are used to perform aggregations and calculations on data, helping answer quantitative questions.*

- ❌ Questions about the attributes of the data

- ❌ Questions that require the use of complicated mathematical formulas

- ❌ Questions about the quality of the data

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3. How is a dimension represented in a table data model?

- ❌ Dimensions are represented as the header row in a table data model

- ❌ Dimensions are represented as unique data points in a table data model

- ✅ **Dimensions are represented by the columns of a table data model**
  🟦 *Each column represents a dimension, describing attributes of the data (e.g., title, genre, date).*

- ❌ Dimensions are represented by the rows of a table data model

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4. A data analyst is experimenting with how their data can be visualized. What is one of the benefits of this practice?

- ✅ **Helps to refine the hypotheses**
  🟦 *Trying different visualizations can reveal patterns and guide the analyst in shaping better questions and hypotheses.*
- ❌ Helps to create patterns in data
- ❌ Helps to decide the color pallet
- ❌ Helps to refine the visualization limits

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5. How does data exploration help a data analyst avoid mistakes in a visualization?

- ❌ By manually inputting the expected results
- ✅ **By identifying outliers and abnormalities**
  🟦 *Exploration helps detect data issues early, such as outliers or errors, which can distort visualizations.*
- ❌ By creating shortcuts in the visualization
- ❌ By setting the users' access permissions in an early stage