Attempt 2
All questions
Question 1: **Correct**
Dimensions containing _____ and _____ values cannot be continuous.

- ☑ **Boolean**

  (Correct)

- ☐ **Date**

- ☑ **String**

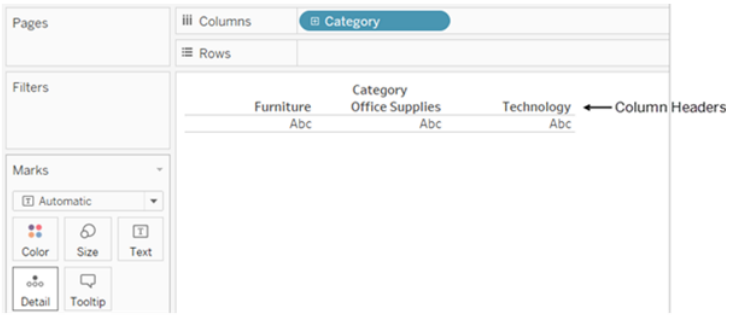
  (Correct)

- ☐ **Date and Time**

Explanation
According to Tableau's official documentation -

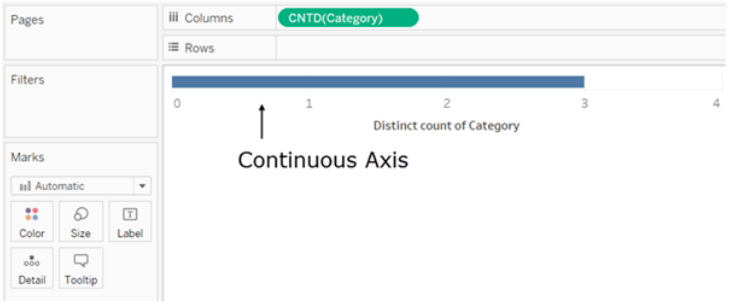
Dimension fields in the view

When you drag a discrete dimension field to **Rows** or **Columns**, Tableau creates column or row headers.



In many cases, fields from the **Dimension** area will initially be discrete when you add them to a view, with a blue background. Date dimensions and numeric dimensions can be discrete or continuous, and all measures can be discrete or continuous.

After you drag a dimension to **Rows** or **Columns**, you can change the field to a measure just by clicking the field and choosing **Measure**. Now the view will contain a continuous axis instead of column or row headers, and the field's background will become green:



Date dimensions can be discrete or continuous. Dimensions containing strings or Boolean values cannot be continuous.

Reference: https://help.tableau.com/current/pro/desktop/en-us/datafields_typesandroles.htm

Question 2: **Correct**

True or False: It is possible to add a field to more than one hierarchy

- ◉

  True

  (Correct)

- ○

  False

Explanation
Yes! It is possible to duplicate a field and add it to more than one hierarchy. Right click and choose duplicate.

Reference: https://www.tableau.com/about/blog/2016/8/take-note-these-10-handy-tableau-shortcuts-57561

Question 3: **Correct**
Most viewers scan content starting at the _____ of a page.

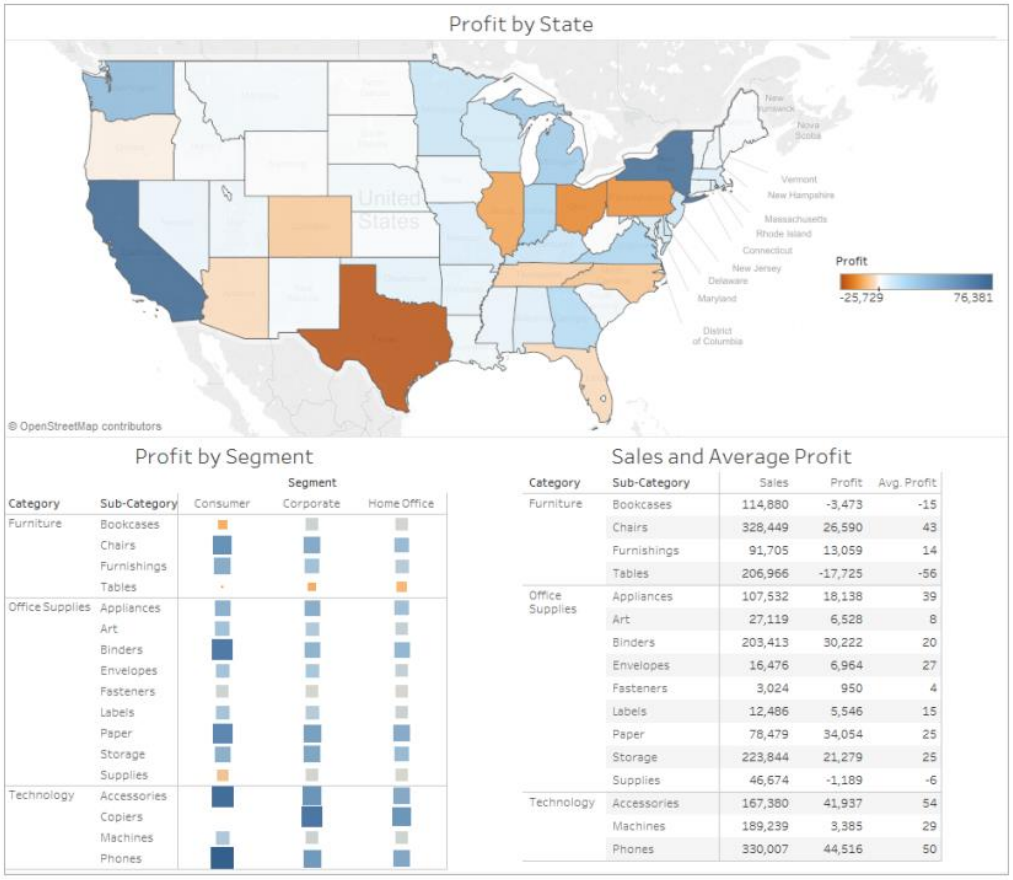
- **top left**

  (Correct)
- **center**
- **top right**
- **bottom right**
- **bottom left**

Explanation
According to Tableau's official documentation:

Leverage the most-viewed spot

Most viewers scan web content starting at the top left of a web page. Once you know your dashboard's main purpose, be sure to place your most important view so that it occupies or spans the upper-left corner of your dashboard. In the dashboard below, the author decided that the map view holds the key message.



Reference: https://help.tableau.com/current/pro/desktop/en-us/dashboards_best_practices.htm

Question 4: **Correct**

Relationships are represented by _____ and operate at the _____.

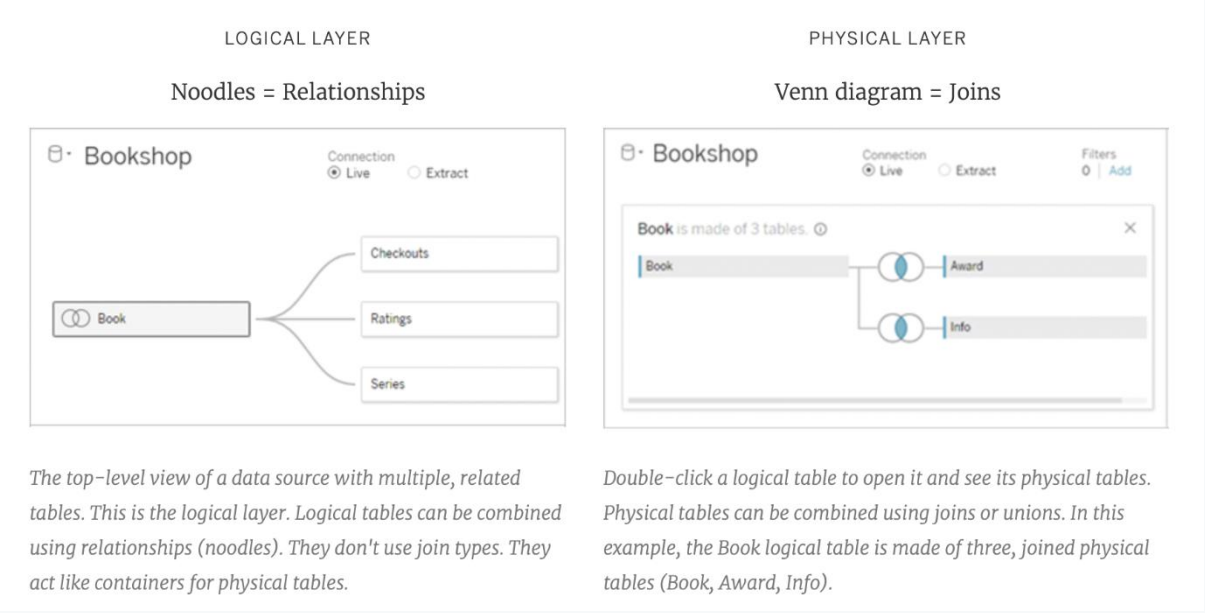
- **noodles, physical layer**
- **Venn diagrams, logical layer**

- Venn diagrams, physical layer
- noodles, logical layer

  (Correct)

Explanation
From the official documentation:

The default view that you first see in the Data Source page canvas is the **logical layer** of the data source. You combine data in the logical layer using relationships (or noodles).



The top-level view of a data source with multiple, related tables. This is the logical layer. Logical tables can be combined using relationships (noodles). They don't use join types. They act like containers for physical tables.

Double-click a logical table to open it and see its physical tables. Physical tables can be combined using joins or unions. In this example, the Book logical table is made of three, joined physical tables (Book, Award, Info).

Reference: https://help.tableau.com/current/server/en-us/datasource_datamodel.htm

Question 5: **Correct**
When you want to first apply a filter and THEN show the Top N or Bottom N elements, which of the following filters would you use?

- None of the these
- Extract Filter
- Data source Filter
- Context Filter

  (Correct)

Explanation
IMPORTANT QUESTION, PAY ATTENTION

By default, all filters that you set in Tableau are computed **independently**. That is, each filter accesses all rows in your data source without regard to other filters. However, you can set one or more categorical filters as context filters for the view. You can think of a context filter as being an **independent** filter. Any other filters that you set are defined as dependent filters because they process only the data that passes through the context filter.

You may create a context filter to:

1) Improve performance – If you set a lot of filters or have a large data source, the queries can be slow. You can set one or more context filters to improve performance.

2) Create a dependent numerical or top N filter – You can set a context filter to include only the data of interest, and then set a numerical or a top N filter.

Reference: https://help.tableau.com/current/pro/desktop/en-us/filtering_context.htm

Question 6: **Correct**
Is SUM a table calculation?

-

Yes

- **No**

(Correct)

Explanation
SUM is an **aggregate function**, not a table calculation!

A table calculation is a transformation you apply to the values in a visualization. Table calculations are a special type of calculated field that computes on the **local** data in Tableau. They are calculated based on what is currently in the visualization and do not consider any measures or dimensions that are filtered out of the visualization.

The most common Table calculations are:

Running Total

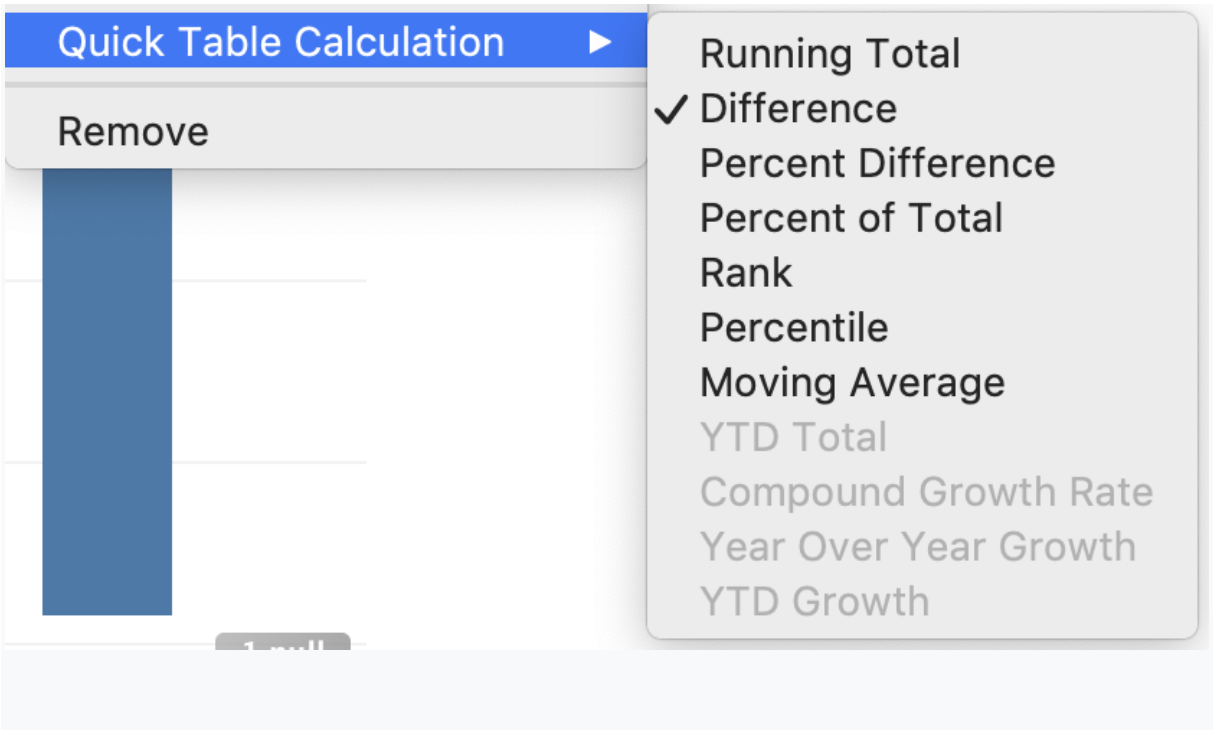
Percent Difference

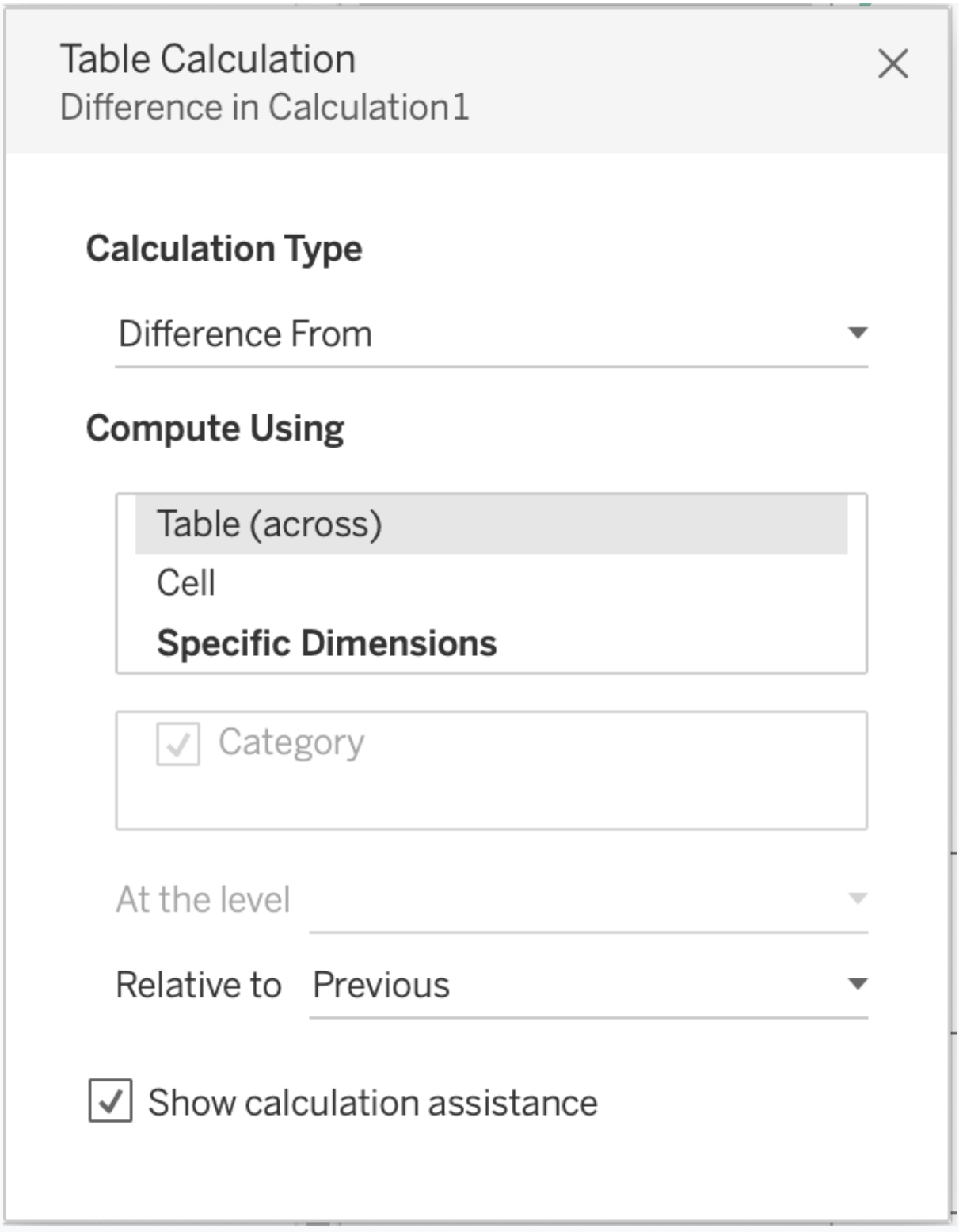
Difference

Percent of Total

Rank

Percentile


Quick Table Calculation
Remove
Running Total
Difference
Percent Difference
Percent of Total
Rank
Percentile
Moving Average
YTD Total
Compound Growth Rate
Year Over Year Growth
YTD Growth



These can be calculated using : Table(across), Cell, or Specific dimensions!

Reference: https://help.tableau.com/current/pro/desktop/en-us/calculations_tablecalculations_definebasic_runningtotal.htm

Question 7: **Correct**

Which of the following are valid objects when creating a dashboard in Tableau? Choose 4.

- ☑ **Text** **(Correct)**
- ☑ **Extension** **(Correct)**
- ☑ **Web Page** **(Correct)**
- ☐ **Video**
- ☑ **Image** **(Correct)**

Explanation

Video is **NOT** a valid object type while creating dashboards in Tableau! All others are valid object types.

Add dashboard objects and set their options

In addition to sheets, you can add dashboard objects that add visual appeal and interactivity. Here's guidance about each type:

- **Horizontal** and **Vertical** objects provide layout containers that let you group related objects together and fine-tune how your dashboard resizes when users interact with them.
- **Text** objects can provide headers, explanations, and other information.
- **Image** objects add to the visual flavor of a dashboard, and you can link them to specific target URLs.
- **Web Page** objects display target pages in the context of your dashboard. Be sure to review these web security options, and be aware that some web pages don't allow themselves to be embedded—Google is one example.
- **Blank** objects help you adjust spacing between dashboard items.
- **Navigation** objects let your audience navigate from one dashboard to another, or to other sheets or stories. You can display text or an image to indicate the button's destination to your users, specify custom border and background colors, and provide informational tooltips.
- **Download** objects let your audience quickly create a PDF file, PowerPoint slide, or PNG image of an entire dashboard, or a crosstab of selected sheets. Formatting options are similar to Navigation objects.

  > **Note:** Crosstab download is possible only after publishing to Tableau Online or Tableau Server.

- **Extension** objects let you add unique features to dashboards or integrate them with applications outside Tableau.

Add an object

From the **Objects** section at left, and drag an item to the dashboard on the right:

Reference: https://help.tableau.com/current/pro/desktop/en-us/dashboards_create.htm

Question 8: **Correct**

Which of the following shapes does a Heat Map use by default?

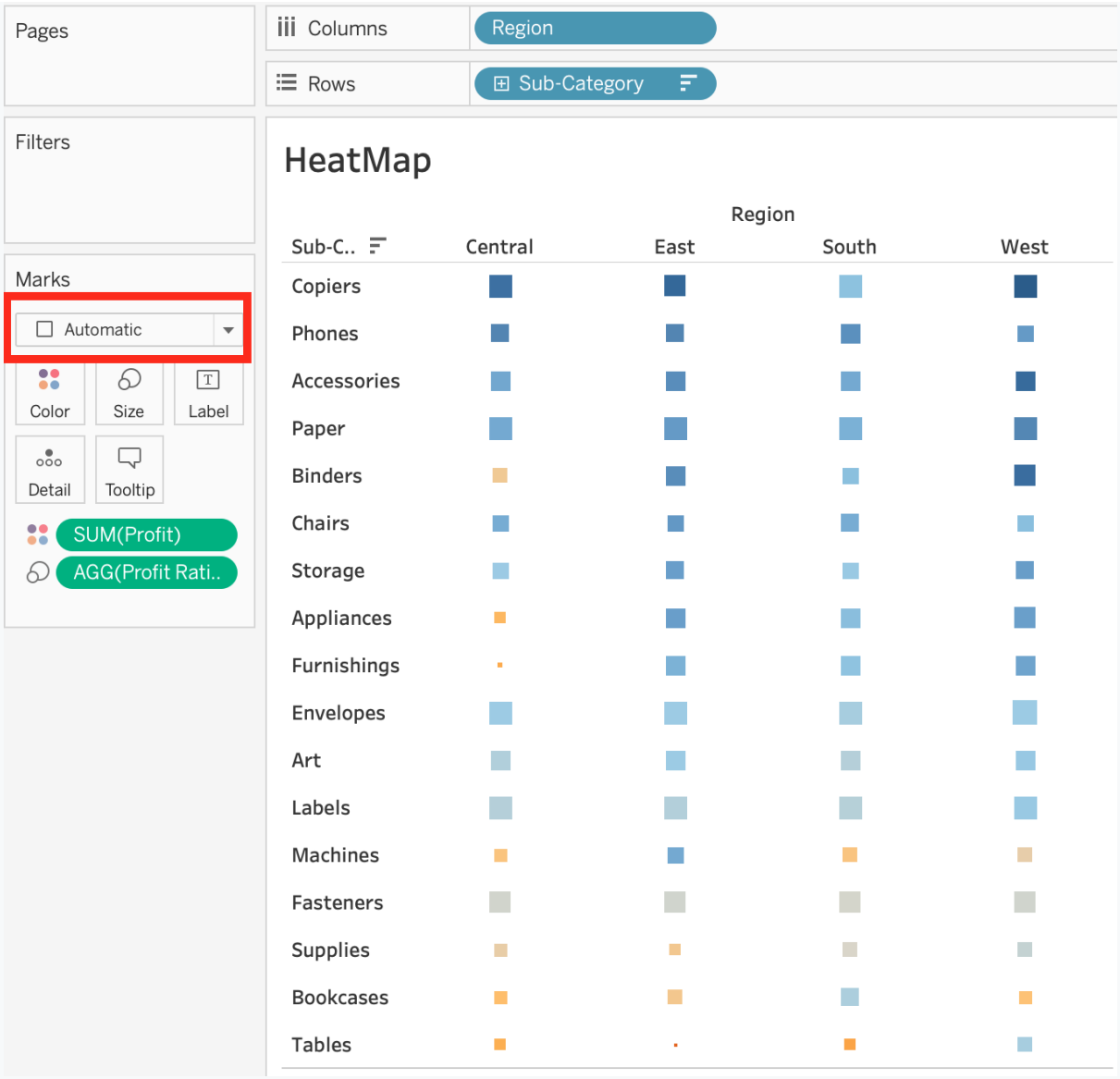
- ○

- **Text**
- **Line**
- **Square**

  (Correct)
- **Circle**

Explanation

By default, the shape that a Heap map uses is a **"Square".** See below:



Reference: https://help.tableau.com/current/pro/desktop/en-us/buildexamples_highlight.htm

Question 9: **Correct**

Is it possible to add both a Dashboard and a Worksheet at the same time to a Story Point in Tableau?

- **No**

  (Correct)

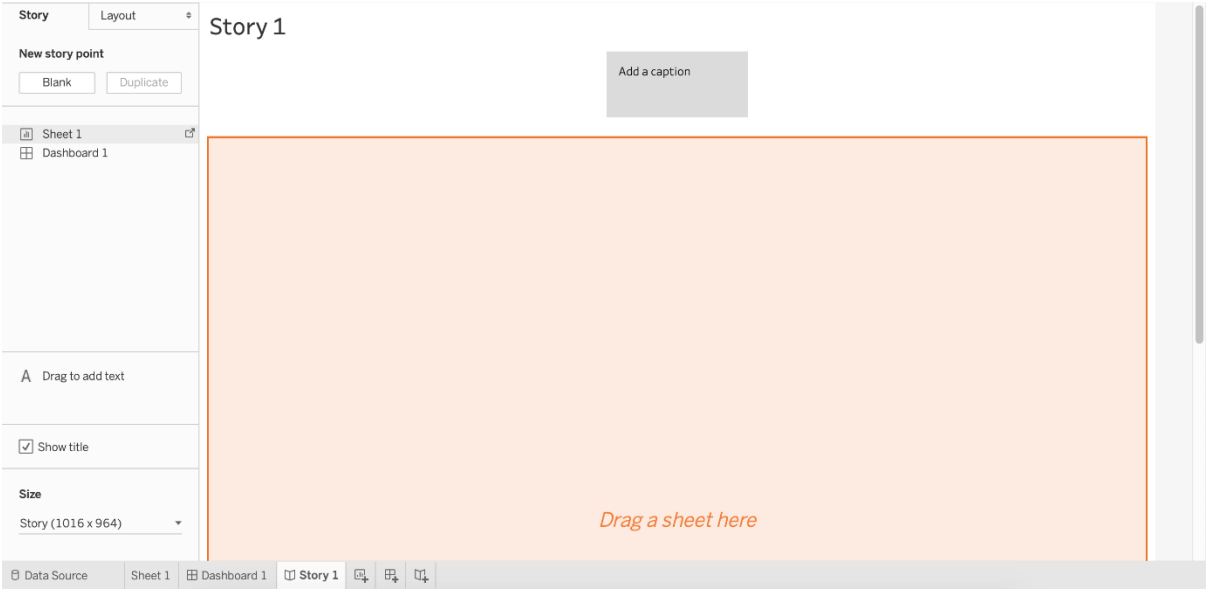
Yes

Explanation

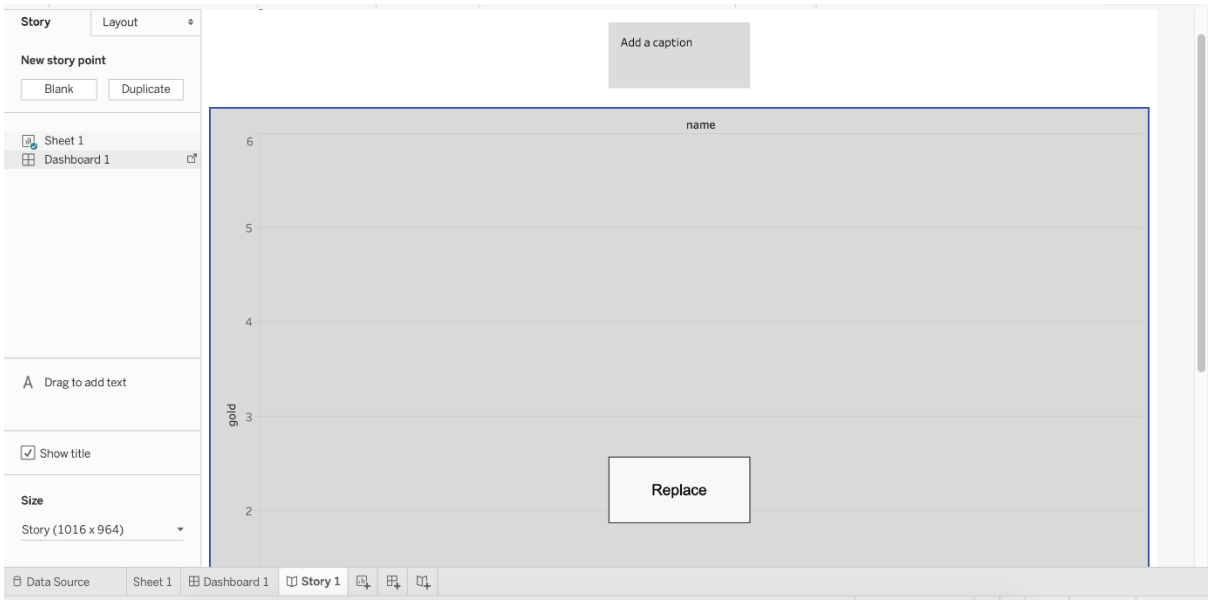
This is a tricky question. We are talking about story **POINTS**, and not entire stories in the question.

To create a story, lets say I have a blank story with 1 dashboard and 1 worksheet.

I can simply drag the dashboard into the view to create a new story point.



Now, if I try to adjust the worksheet beside it in this same view, I cannot. See below:



The only option available is to replace the existing view. Therefore, the answer is NO since they both cannot be added.

Read more about stories in Tableau: https://help.tableau.com/current/pro/desktop/en-us/story_create.htm

Question 10: **Correct**

As a general best practice, how many categories can a pie chart display effectively?

- **3 to 5**
- **2 to 5**

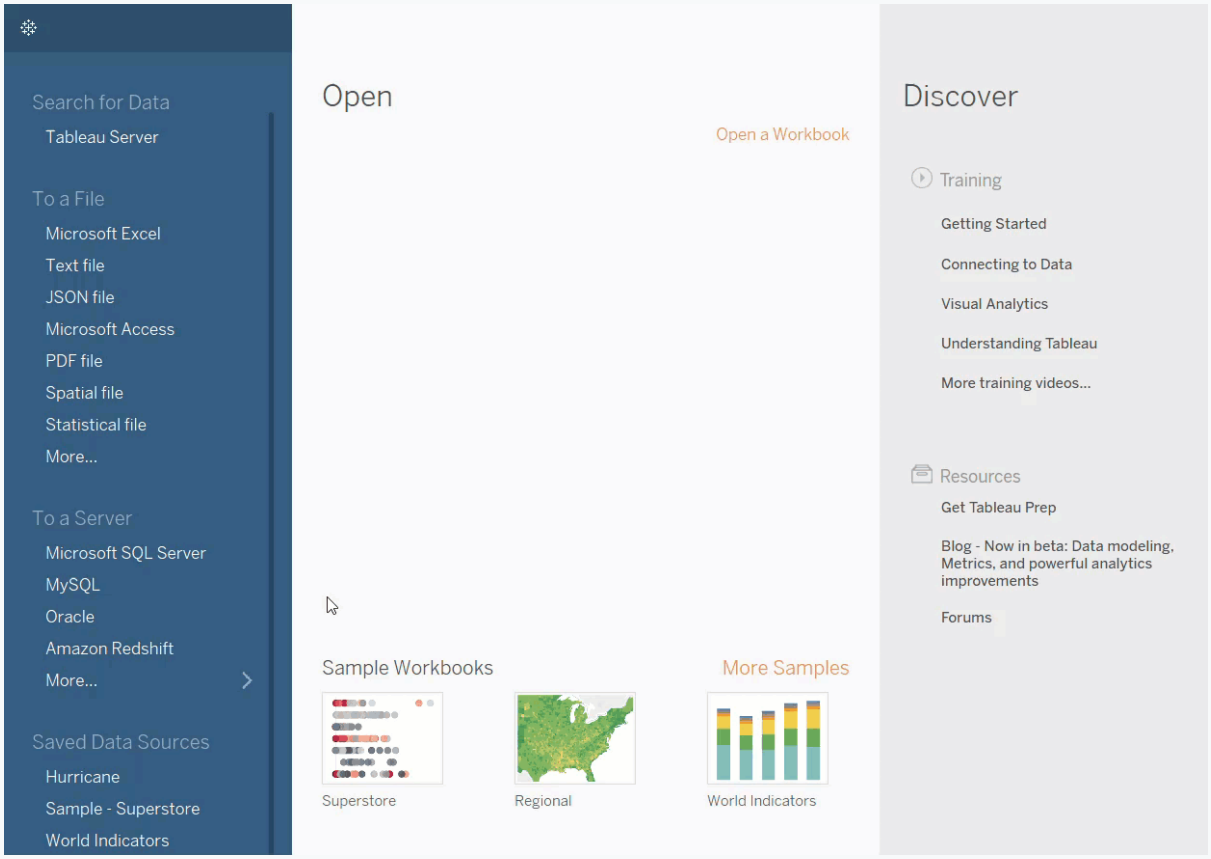
  (Correct)
- **3 to 7**

2 to 8

Explanation

As a general best practice, your pie chart should contain **2 to 5** categories. Anything more than that is not easy for the eyes to distinguish. This is a common question and mentioned in Tableau's own eLearning module as well!

See how to build a pie chart:



Reference: https://help.tableau.com/current/pro/desktop/en-us/buildexamples_pie.htm

Question 11: **Correct**

True or False: It is not possible to blend axes for multiple measures into a single axis

- ◉

False

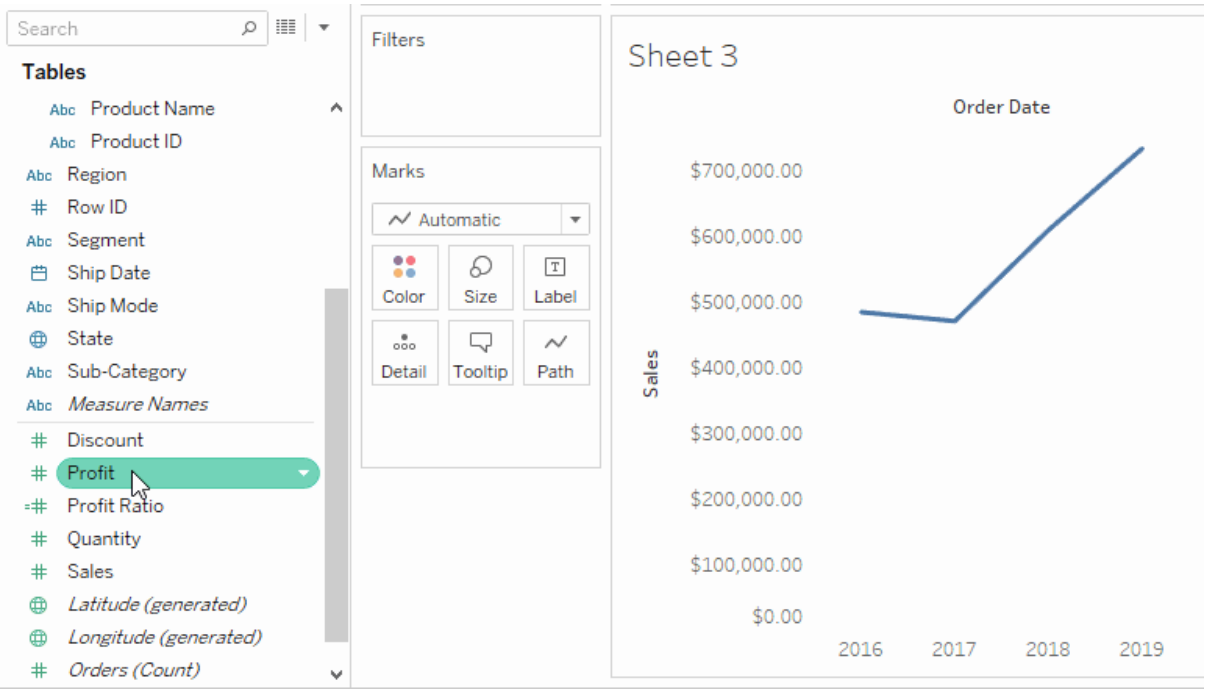
(Correct)

- **True**

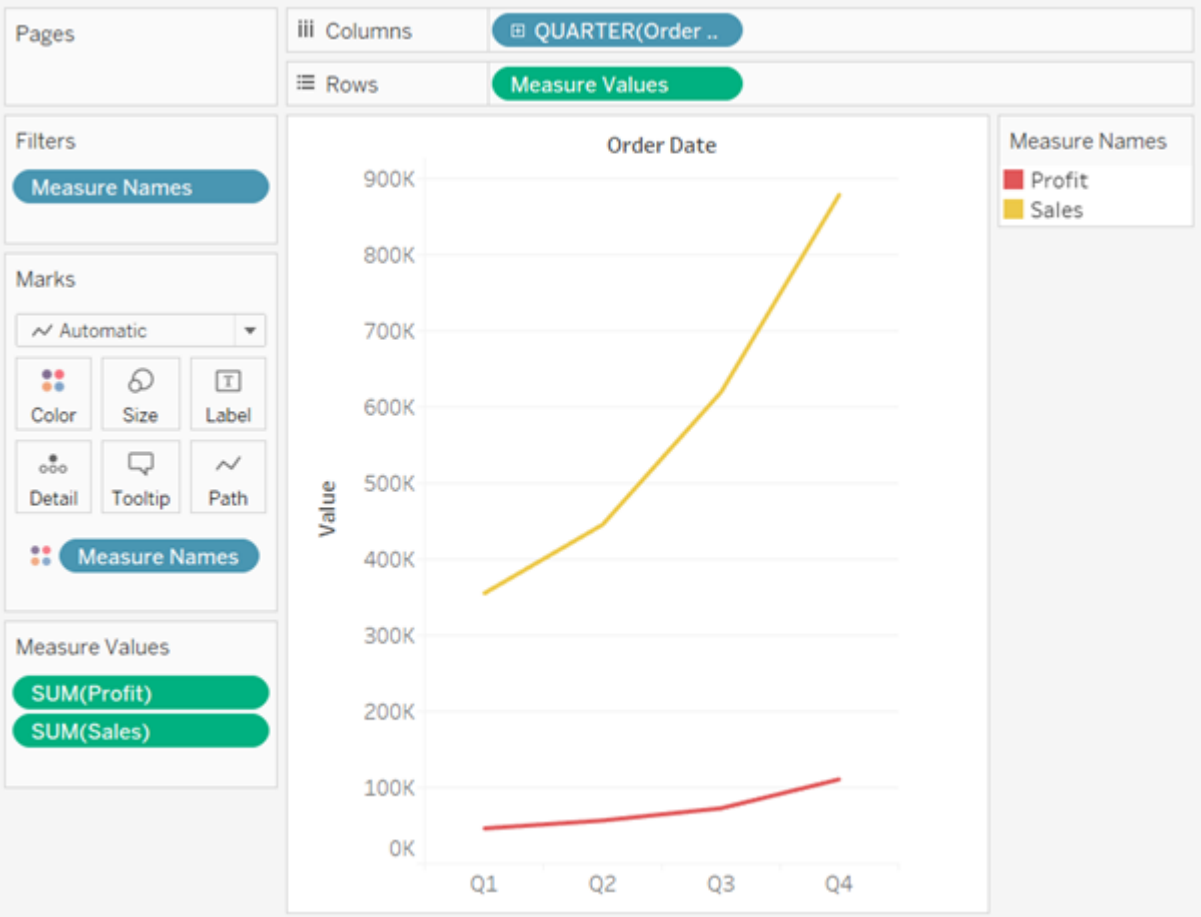
Explanation

We can very much blend multiple measures into a single axis. Such charts are called Combined-Axis / Blended-Axis charts. Follow along:

Measures can share a single axis so that all the marks are shown in a single pane. To blend multiple measures, drag one measure or axis and drop it onto an existing axis.



Instead of adding rows and columns to the view, when you blend measures there is a single row or column and all of the values for each measure is shown along one continuous axis. For example, the view below shows quarterly sales and profit on a shared axis.



Note: If you drag a measure on to the canvas and only see a **single** ruler indicator instead of the double ruler indicator shown below, Tableau creates **dual axes** instead of a blended axis. For more information about how to create dual axes, see Compare two measures using dual axes.

Reference: https://help.tableau.com/current/pro/desktop/en-us/multiple_measures.htm

Question 12: **Correct**

You just added this field to the Columns shelf.

What will this create?

A horizontal axis

(Correct)

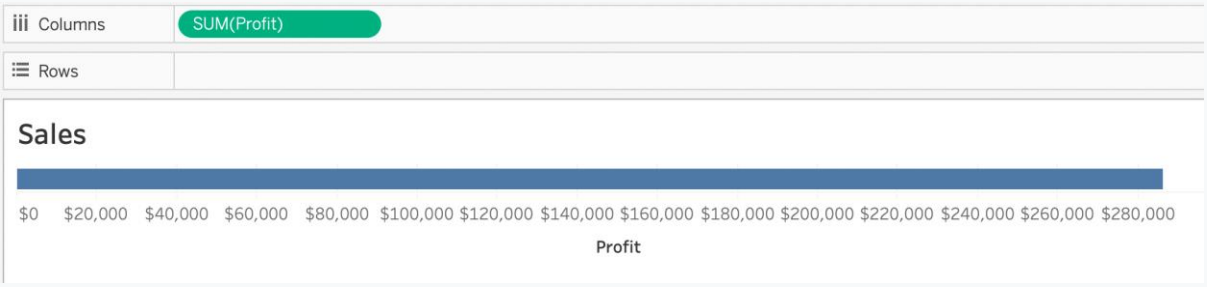
- **A horizontal header**

- **A vertical header**

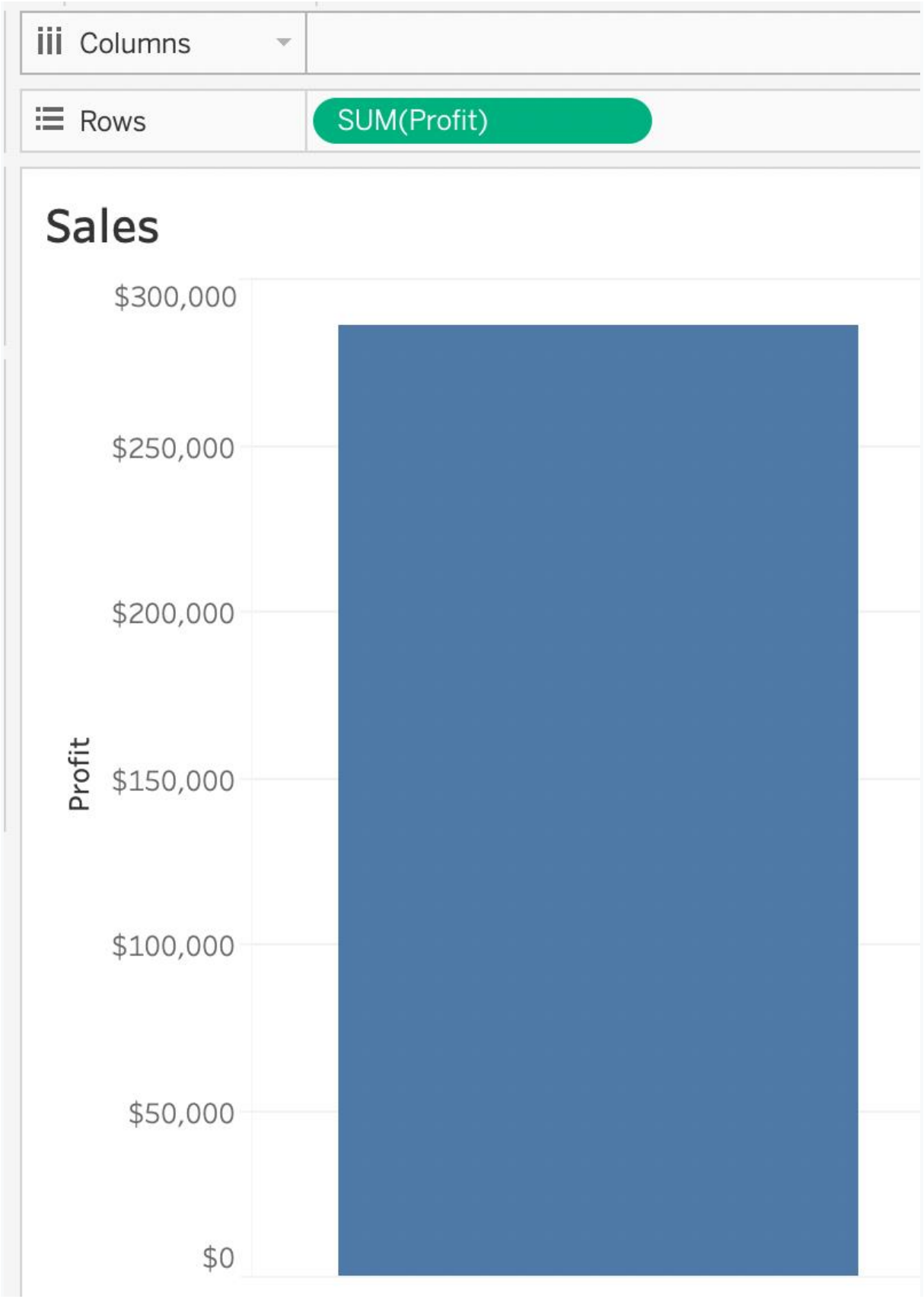
- **A vertical axis**

Explanation

This question can be confusing for many students, so in such cases it's always best to practically try the question out in Tableau. We know that continuous fields will always create an axis, so options stating 'header' are automatically eliminated. For our question, see below:



Had the question asked us to place this pill on the Rows shelf instead, we would've gotten a different answer:



Question 13: **Correct**

True or False: We get different colour pallete options if we drop a discrete field on "Color" in the marks card compared to if we drop a continous field on Color.

- False
- True

(Correct)

Explanation
Yes! We get different color palettes. They are:

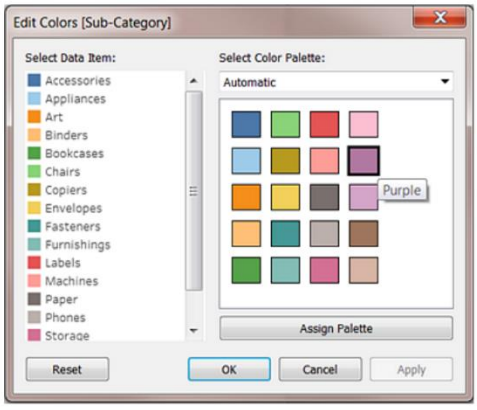
From the official Tableau documentation

Categorical Palettes

When you drop a field with discrete values (typically a dimension) on **Color** on the **Marks** card, Tableau uses a categorical palette and assigns a color to each value of the field. Categorical palettes contain distinct colors that are appropriate for fields with values that have no inherent order, such as departments or shipping methods.

To change colors for values of a field, click in the upper-right corner of the color legend. In Tableau Desktop, select **Edit Colors** from the context menu. In Tableau Server or Tableau Online, the Edit Colors dialog opens automatically.

Tableau Desktop version



Web version

To change the color for a value

1) Click on an item on the left, under Select Data Item.

2) Click a new color in the palette on the right. In Tableau Desktop you can hover over a swatch to identify the color.

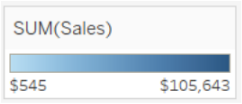
3) Repeat for as many values that you want to change.

4) In Tableau Desktop, click OK to exit the Edit Colors dialog box. In Tableau Server or Tableau Online, simply close the dialog box.

AND

Quantitative Palettes

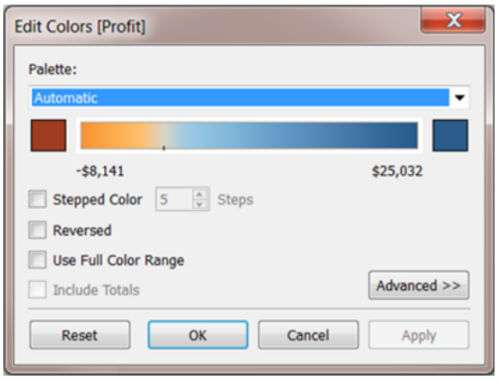
When you drop a field with continuous values on the **Marks** card (typically a measure), Tableau displays a quantitative legend with a continuous range of colors.



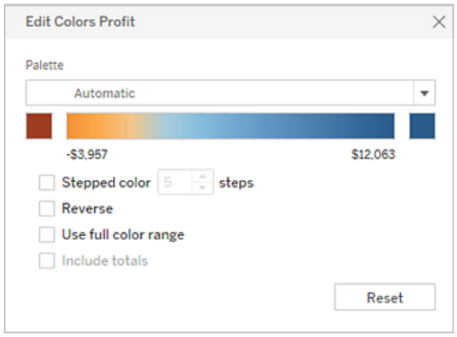
You can change the colors used in the range, the distribution of color, and other properties. To edit colors, click in the upper right of the color legend. In Tableau Desktop, select **Edit Colors** from the context menu. In Tableau Server or Tableau Online, the Edit Colors dialog opens automatically.

When there are both negative and positive values for the field, the default range of values will use two color ranges and the Edit Colors dialog box for the field has a square color box on either end of the range. This is known as a diverging palette.

Tableau Desktop version

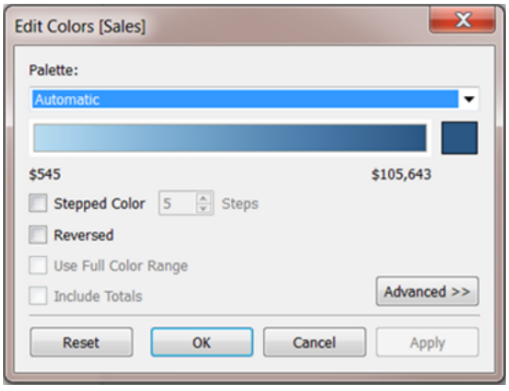


Web version

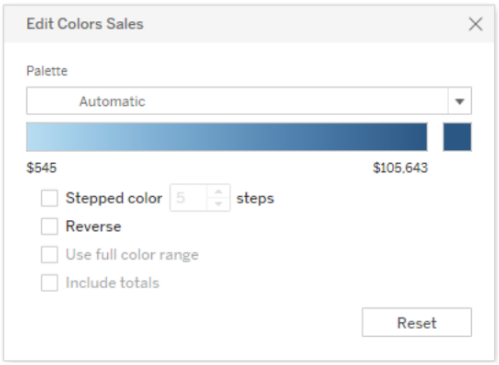


When all values are either positive or negative, the default range of values will use a single color range and the Edit Colors dialog box for the field has a square color box only at the right end of the range. This is known as a sequential palette.

Tableau Desktop version



Web version



Reference: https://help.tableau.com/current/pro/desktop/en-us/viewparts_marks_markproperties_color.htm

Question 14: **Correct**

Tableau auto-generates _____ dimension(s) and _____ measure(s) for us

- **1 , 4**

  (Correct)

- **2 , 2**

- **2 , 3**

- **1 , 2**

Explanation
Tableau auto-generates :

1 Dimension - Measure Names

4 Measures - Latitude, Longitude, Number of records, Measure Values

Starting with Tableau **2020.2**, every table in a data source has a Count field, in the form of *NameofTable*(Count). The table count field is an automatically generated, calculated field. **(THIS IS NOT PRESENT IN VERSION 2020.1 ON WHICH THE EXAM IS CURRENTLY BASED)**

Reference: https://help.tableau.com/current/pro/desktop/en-us/datafields_understanddatawindow.htm

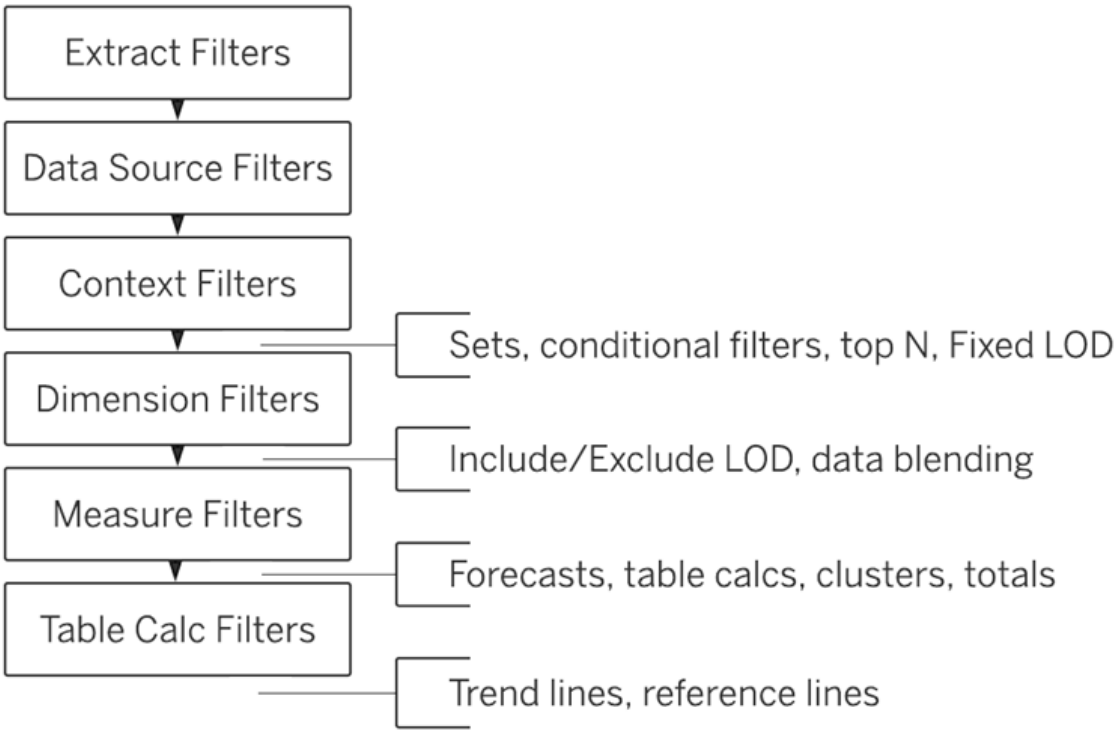
Question 15: **Correct**
Our use case states that we need to create a set showing the Bottom 10 products by Profit in each Region. Which of the following filter types should you apply on Region?

- **Measure Filters**
- **Context Filters**

  (Correct)
- **Extract Filters**
- **Dimension Filters**

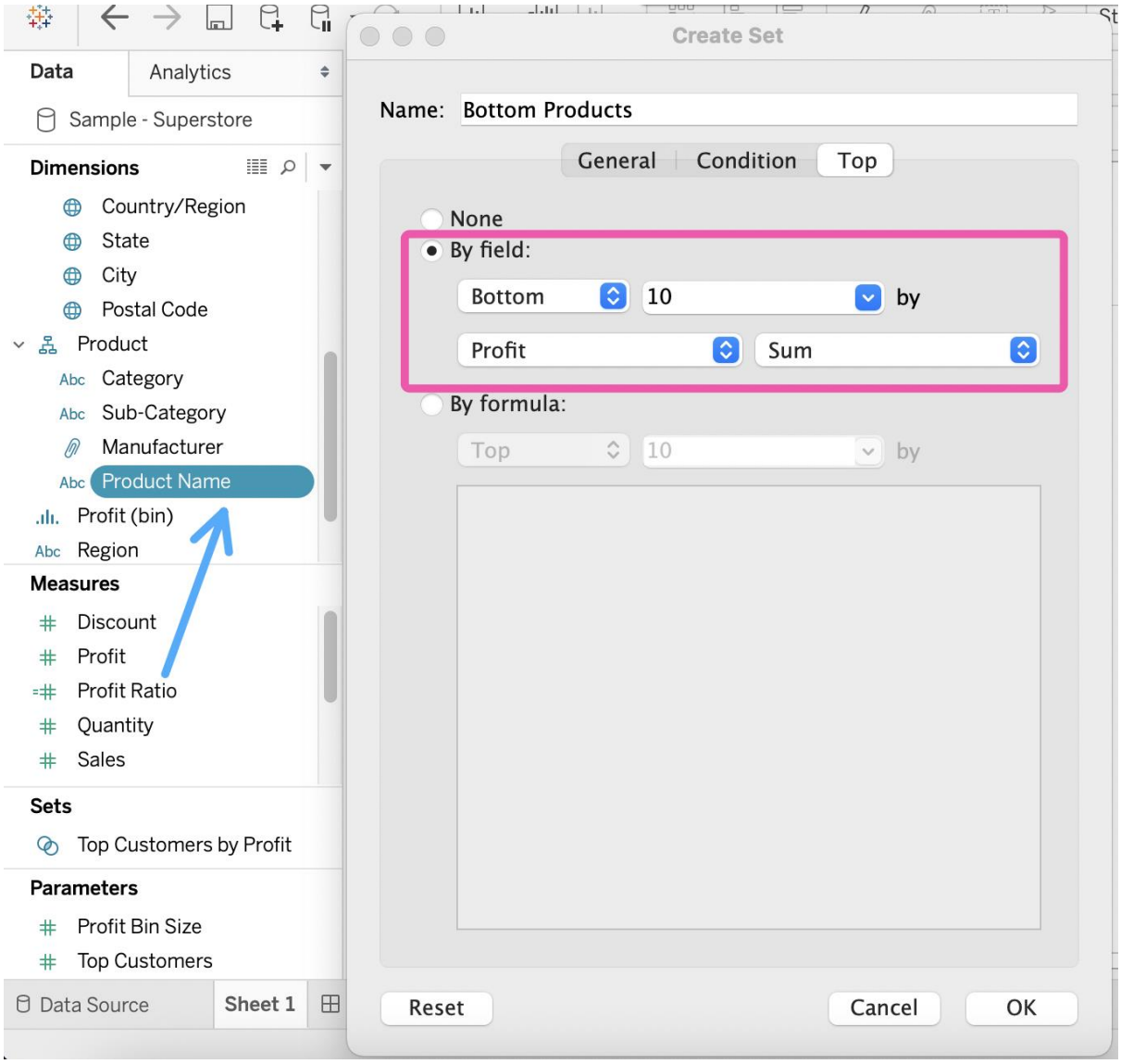
Explanation

The beauty of context filters is that according to Tableau's Order of Operations, they are executed before Sets.

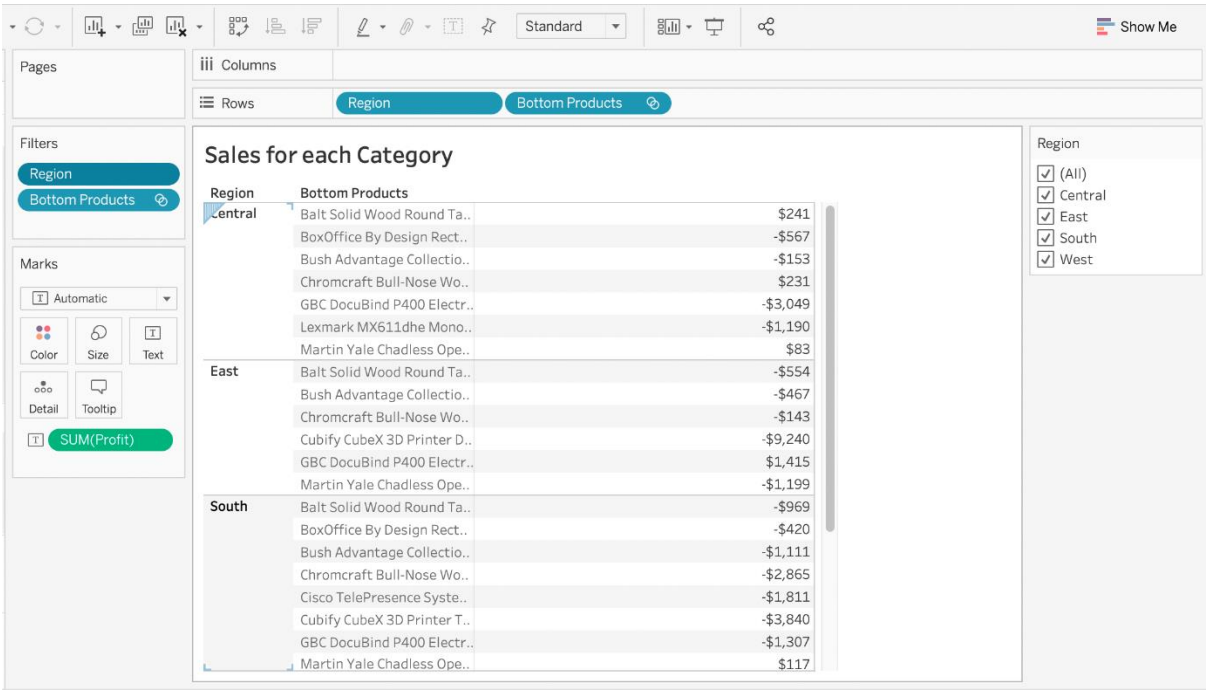


This means that based on what Region's you've selected - Tableau will first only preserve the rows for those Regions. THEN, after this it will compute the Set , i.e , Bottom 10 products in each Region.

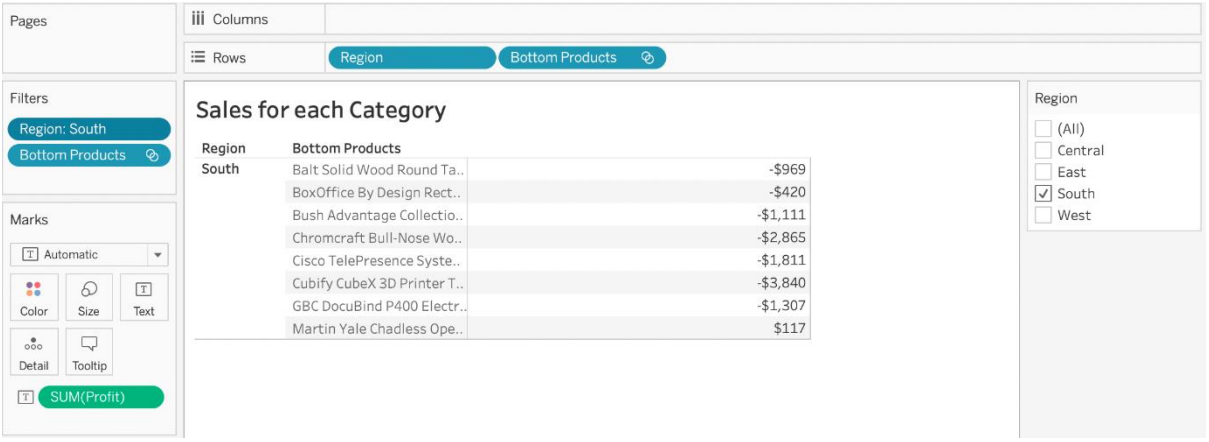
1) First let's create a set to compute the Bottom 10 Products by Profit.



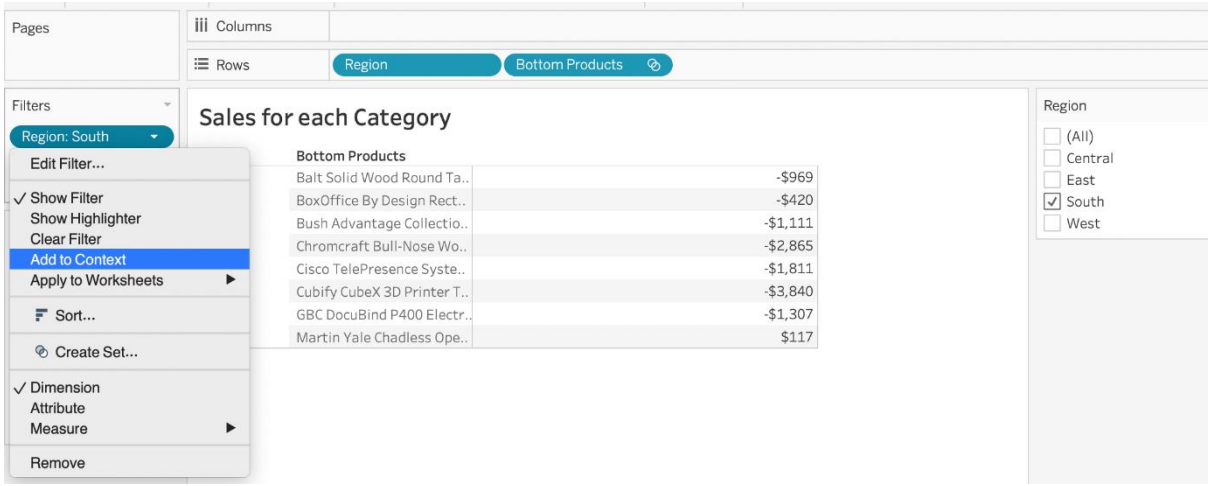
2) Next, take region on the Rows Shelf followed by the Set we just created. Drag Region and the Set to the Filters Shelf as well.



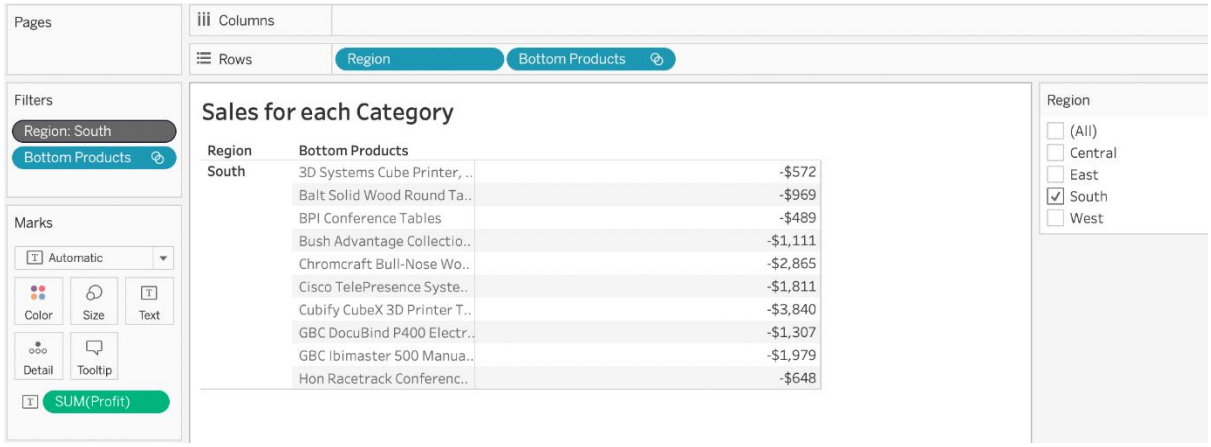
3) Now, try to only visualize the data for the South Region:



4) The problem right now is that Tableau is computing the Set first (Bottom 10 Products), and then applying the Dimension Filter - South Region and hence these values are incorrect. Note how these aren't even 10 products, but rather just 8. To fix this, simply add Region to Context:



Upon doing this, we get the correct answer as :



References: https://help.tableau.com/current/pro/desktop/en-us/order_of_operations.htm

https://help.tableau.com/current/pro/desktop/en-us/filtering_context.htm

Question 16: **Correct**

Which of the following is an example of a Date Part?

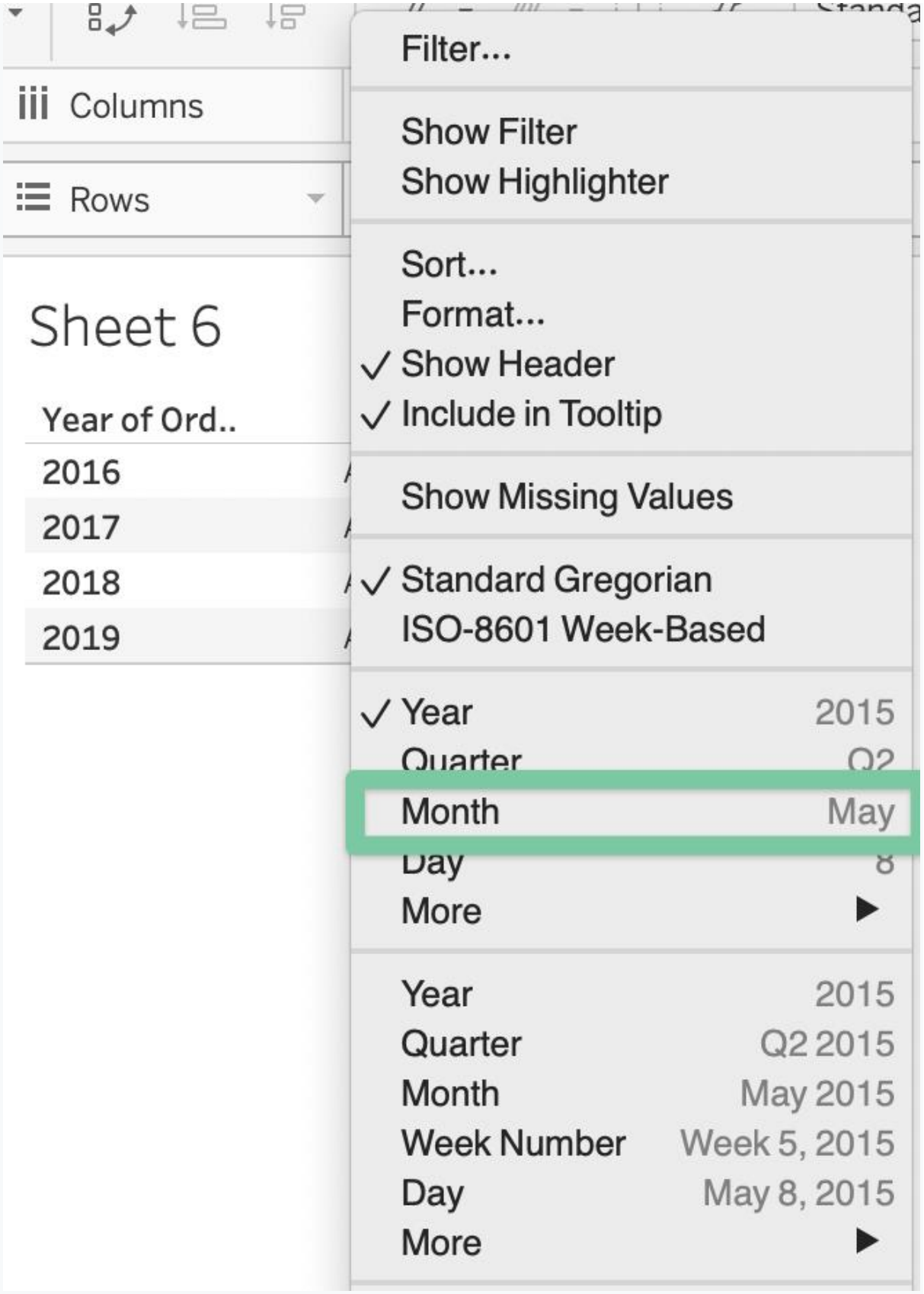
- **November**

  (Correct)

- **Q4 2017**
- **March 2019**
- **September 2020**

Explanation
All answers except November are examples of Date Values (continuous in nature).

See below:



You can see that the option in Green symbolizes our correct answer, i.e only a Month. In our case that month is November (the correct answer).

All other options are combinations **of a year with one other value** (like a month, quarter, or day). So this is how by looking at an option you can know if its a date part or date value!

Question 17: **Correct**
We can join a maximum of _____ tables in Tableau

- **128**
- **16**
- **64**
- **32**

  (Correct)

Explanation
It is possible to join a maximum of **32** tables in Tableau!

Reference: https://www.mytectra.com/interview-question/tableau-interview-question-and-answers

Question 18: **Correct**
If you decide you want to see all of the marks in the view at the most detailed level of granularity, you can _____ the view.

- **break-down the measures**
-

- split the measures
- aggregate the measures
- disaggregate the measures

  (Correct)
- sort the measures

Explanation

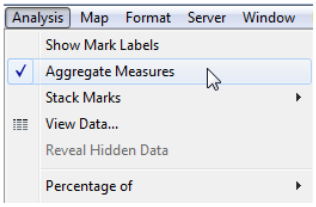
How to Disaggregate Data

Whenever you add a measure to your view, an aggregation is applied to that measure by default. This default is controlled by the **Aggregate Measures** setting in the **Analysis** menu.

If you decide you want to see all of the marks in the view at the most detailed level of granularity, you can disaggregate the view. Disaggregating your data means that Tableau will display a separate mark for every data value in every row of your data source.

To disaggregate all measures in the view:

- Clear the **Analysis >Aggregate Measures** option. If it is already selected, click **Aggregate Measures** once to deselect it.



When **Aggregate Measures** is selected, Tableau will attempt to aggregate measures in the view by default. This means that it collects individual row values from your data source into a single value (which becomes a single mark) adjusted to the level of detail in your view.

The different aggregations available for a measure determine how the individual values are collected: they can be added (SUM), averaged (AVG), or set to the maximum (MAX) or minimum (MIN) value from the individual row values.

The different aggregations available for a measure determine how the individual values are collected: they can be added (SUM), averaged (AVG), or set to the maximum (MAX) or minimum (MIN) value from the individual row values.

For a complete list of the available aggregations, check out - List of Predefined Aggregations in Tableau.

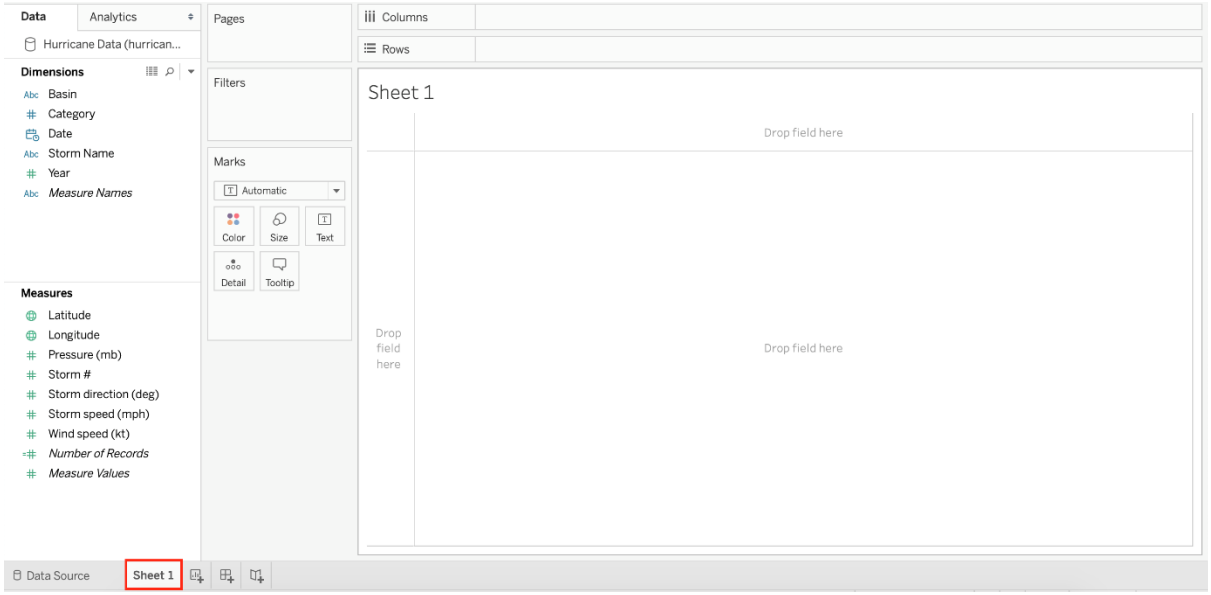
The level of detail is determined by the **dimensions** in your view—for information about the concept of level of detail, see How dimensions affect the level of detail in the view.

Disaggregating your data can be useful for analyzing measures that you may want to use both independently and dependently in the view. For example, you may be analyzing the results from a product satisfaction survey with the Age of participants along one axis. You can aggregate the Age field to determine the average age of participants or disaggregate the data to determine at what age participants were most satisfied with the product.

Disaggregating data can be useful when you are viewing data as a scatter plot. See Example: Scatter Plots, Aggregation, and Granularity.

Reference: https://help.tableau.com/current/pro/desktop/en-us/calculations_aggregation.htm

Question 19: **Correct**

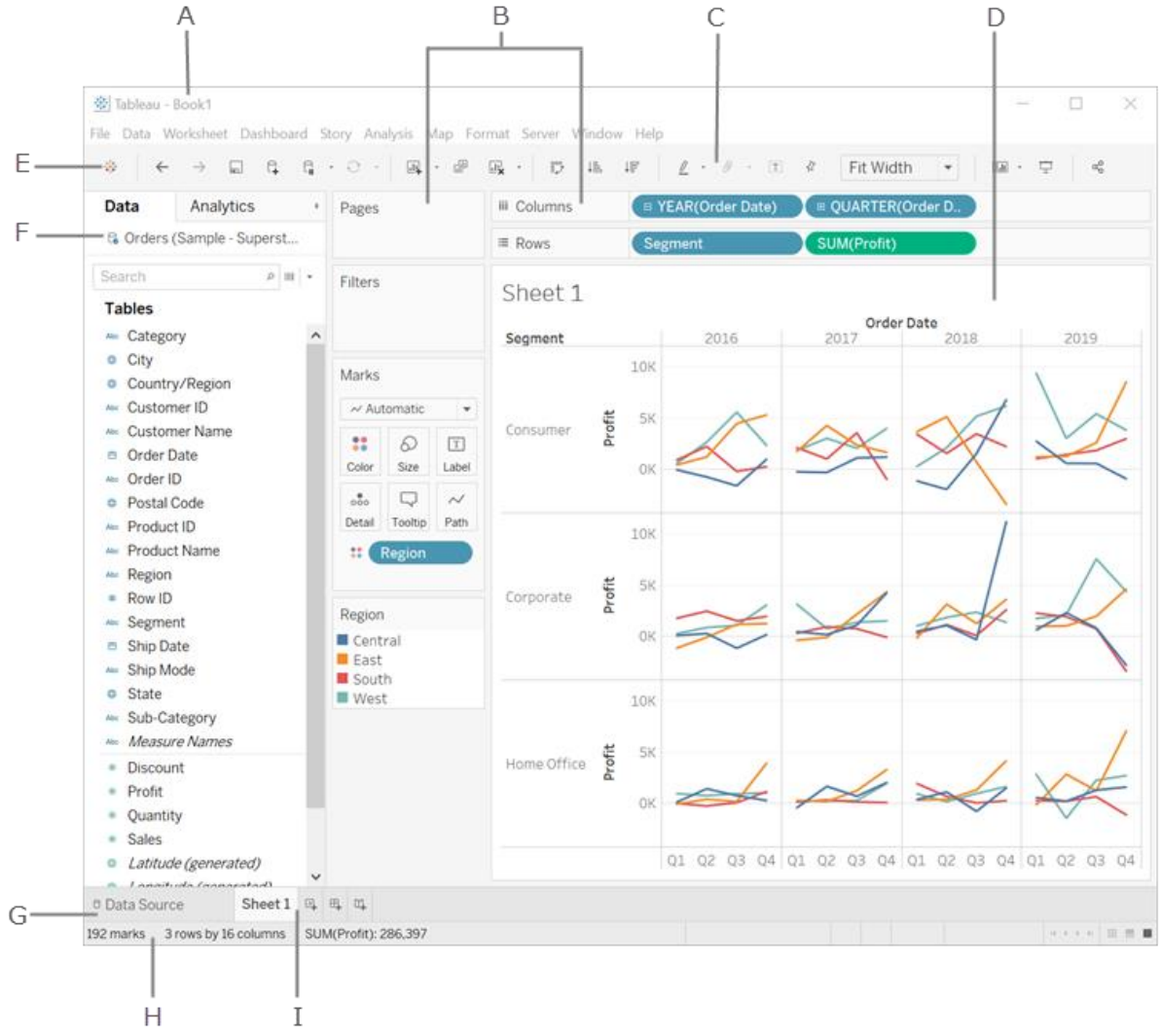


You clicked Sheet 1 from the data source page, and now you have opened the Tableau Desktop workspace as shown above. What is the main thing that you do here?

- **Clean the data**
- **Rename the fields and change data types**
- **Preview the data**
- **Create visualisations to analyze your data**

  (Correct)

Explanation
The Tableau workspace consists of menus, a toolbar, the Data pane, cards and shelves, and one or more sheets. Sheets can be worksheets, dashboards, or stories. For details on dashboard or story workspaces, see Create a Dashboard or The Story Workspace.



The main thing you do in the workspace is to create visualisations to analyze your data.

Renaming data fields, cleaning the data, previewing the data can all be done in the Data source window.

Reference: https://help.tableau.com/current/pro/desktop/en-us/environment_workspace.htm

Question 20: **Correct**

Which of the following chart type makes use of 'binned' data?

- Treemaps
- Histogram

  (Correct)
- Gantt Chart
- Bullet chart

Explanation

A histogram is a chart that displays the shape of a distribution. A histogram looks like a bar chart but groups values for a continuous measure into ranges, or **bins**.

The basic building blocks for a histogram are as follows:

Mark type:	Automatic
Rows shelf:	Continuous measure (aggregated by Count or Count Distinct)
Columns shelf:	Bin (continuous or discrete). ***Note**: This bin should be created from the continuous measure on the Rows shelf. For more information on how to create a bin from a continuous measure, see Create Bins from a Continuous Measure.*

Reference: https://help.tableau.com/current/pro/desktop/en-us/buildexamples_histogram.htm

Question 21: **Correct**

You have cleaned a data source properly, created some calculated fields and renamed some columns. You want to save these changes for future use cases. Which of the following would BEST satisfy this requirement?

- **Save it as a .tds file**

  (Correct)

- **Save it as a .twb file**

- **Save it as a .twbx file**

- **Save it as a .twm file**

Explanation

After making changes to Data, we can save that new data source as a .tds file. To do so, go to data menu on top and then choose your current connected data source. Then next click on Add to Saved Data sources. This will save all calculated fields, changes to fields etc. It will be saved in My Tableau Repository -> Mydatasources. This will then also appear on Tableau Home Page under saved data sources like SampleSuperStore.

Note: Data source files do not contain the actual data but rather the information necessary to connect to the actual data as well as any modifications you've made on top of the actual data such as changing default properties, creating calculated fields, adding groups, and so on.

.twb and .twbx are not the BEST solutions since the questions nowhere mentions that we need to store our workbooks as well.

.twm is a bookmark which contains a single worksheet and are an easy way to quickly share your work.

Reference: https://help.tableau.com/current/pro/desktop/en-us/environ_filesandfolders.htm

Question 22: **Correct**

Which of the following fields would be best used as Dimensions?

- ☐ **Sales**
- ☑ **Names**

  (Correct)
- ☐ **Profit**
- ☑ **Categories**

  (Correct)

Explanation

Names and Categories would be mostly used as dimensions (categorical data).

Profit and measures contain quantitative data and would be more suitable for Measures!

Reference: https://help.tableau.com/current/pro/desktop/en-us/datafields_typesandroles.htm

Question 23: **Correct**

By default, measures placed in a view are aggregated. The type of aggregation applied _____

- ○ **is always COUNT**

- **is always AVERAGE**
- **depends on the context of the view**

  (Correct)
- **is always sum**

Explanation
By default, measures placed in a view are aggregated. Mostly you'll notice that the aggregation is SUM, but not **ALWAYS**.

The type of aggregation applied varies depending on the context of the view.

Reference: https://help.tableau.com/current/pro/desktop/en-us/calculations_aggregation.htm

Question 24: **Correct**
How would you calculate GDP per capita in Tableau?

- **SUM([Population]/[GDP]])**
- **SUM([GDP]*[POPULATION])**
- **SUM([GDP]/[POPULATION])**
- **SUM([GDP]) / SUM([Population])**

(Correct)

Explanation
GDP / Population = GDP Per Capita

```
SUM([GDP])/SUM([Population]) + [Parameter]
//This ratio calculates GDP/capita
```

Here Sum is a function, / and + are operators. On the bottom there are comments.

Question 25: **Correct**
True or False: Trend lines can only be used with numeric or date fields

- **False**
- **True**

  (Correct)

Explanation
You can show trend lines in a visualization to highlight trends in your data.

To add trend lines to a view, **both axes must** contain a field that can be interpreted as a **number**. For example, you **cannot** add a trend line to a view that has the Product Category dimension, which contains strings, on the Columns shelf and the Profit measure on the Rows shelf.

However, you can add a trend line to a view of sales over time because both sales and time can be interpreted as numeric values.

Reference: https://help.tableau.com/current/pro/desktop/en-us/trendlines_add.htm

Question 26: **Correct**

True or False: The Highlighting action can be disabled for the entire workbook.

- **True**

  (Correct)

- **False**

Explanation

Yes, it is possible to disable highlighting for the entire workbook.

Legends	• Supports one-way and two-way highlighting. • Highlight on colour, size or shape. • You can disable or enable the highlighting action for the workbook or sheets from the toolbar. • Your selection is saved with the workbook and can be included in dashboards and stories and when publishing.	• When you want to focus on select members in a view and dim all others. • When you want to highlight using only the legend or the legend and the view. • Works well with small domains or views with a small amount of data.

For more information : https://help.tableau.com/current/pro/desktop/en-gb/actions_highlight.htm

Question 27: **Correct**

In order to avoid any confusions, what should you do after creating a Dual-axis chart?

- **Synchronise the axis**

  (Correct)

-

Edit the labels

-

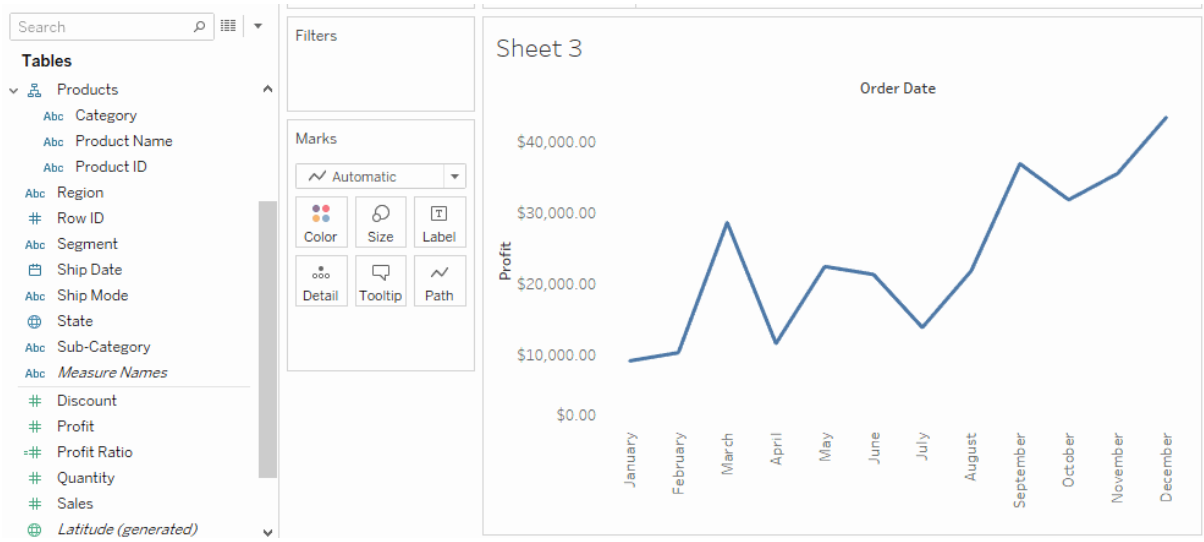
Change the colours

-

Hide the axis

Explanation

After creating a dual axis chart, make sure to synchronise their axis since they both might not be having the same y-axis.

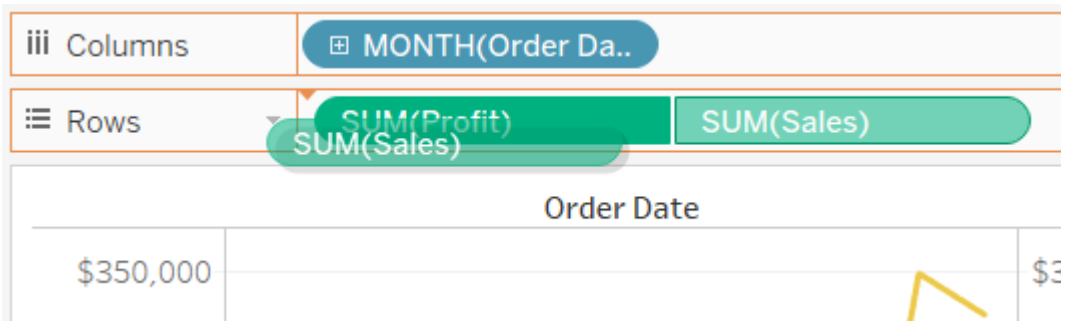


To align the two axes in a dual axes chart to use the same scale, right-click (control-click on Mac) the secondary axis, and select Synchronize Axis. This aligns the scale of the secondary axis to the scale of the primary axis.

In this example, the **Sales axis is the secondary axis and the Profit axis is the primary axis.**

If you would like to change which axis is the primary, and which axis is the secondary, select the field on the Columns or Rows shelf that is the secondary, and drag it in front of the primary field on the shelf until you see an orange triangle appear.

In this example, you can select the SUM(Sales) field on the Rows shelf, and drag it in front of the SUM(Profit) field. The Sales axis is now the primary and the Profit axis is the secondary.



Reference: https://help.tableau.com/current/pro/desktop/en-us/multiple_measures.htm

Question 28: **Correct**

The default path for all supporting files, data sources, icons, logs etc is in _____

- **Documents -> Tableau**
- **Downloads -> Tableau Support Files**
- **Documents -> Tableau Files**
- **Documents -> My Tableau Repository**

  (Correct)

Explanation

By default, all of the above mentioned are stored in Documents -> My Tableau Repository

Reference: https://help.tableau.com/current/pro/desktop/en-us/environ_filesandfolders.htm

Question 29: **Correct**

True or False: All rows from both tables are returned in an INNER JOIN

- **False**

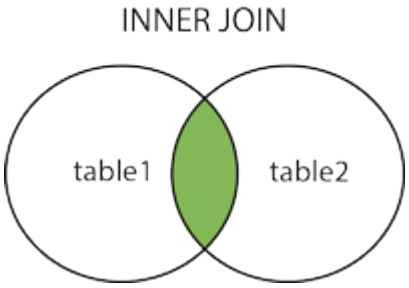
  (Correct)

- **True**

Explanation

The INNER JOIN keyword selects all rows from **both tables** as long as there is a match between the columns. Consider 2 tables "Orders" and "Customers".

If there are records in the "Orders" table that **do not** have matches in "Customers", these orders will **not be shown!**



Reference: https://www.w3schools.com/sql/sql_join_inner.asp

Question 30: **Correct**

_____ enables us to create workbooks and views, dashboards, and data sources in Tableau Desktop, and then publish this content to our own server.

- **Tableau myServer**

- **Tableau Prep**
- **Tableau Server**

  (Correct)
- **Tableau Public**

Explanation
Tableau **SERVER** enables us to create workbooks and views, dashboards, and data sources in Tableau Desktop, and then publish this content to our **own** server.

Moreover, as a Tableau Server **administrator** you will control who has access to server content to help protect sensitive data. Administrators can set user permissions on projects, workbooks, views, and data sources.

Reference: https://www.tableau.com/learn/webinars/introduction-tableau-server

Question 31: **Correct**
By default, what does Tableau do when you connect to a data source?

- **Creates a live connection to the data**

  (Correct)
- **Sorts the data in descending order**
- **Loads your actual file into Tableau**
- **Creates an extract of the data**

Explanation
Before you can build a view and analyze your data, you must first **connect** Tableau to your data. Tableau supports connecting to a wide variety of data, stored in a variety of places.

By default, when you connect a data source to Tableau, Tableau will create a live connection to the data.

Live connection refers to a data source that contains direct connection to underlying data, which provides real-time or near real-time data. With a live connection, Tableau makes queries directly against the database or other source, and returns the results of the query for use in a workbook. Users can create live connections and then share them on Tableau Server so that other Tableau users can use the same data using the same connection and filtering settings.

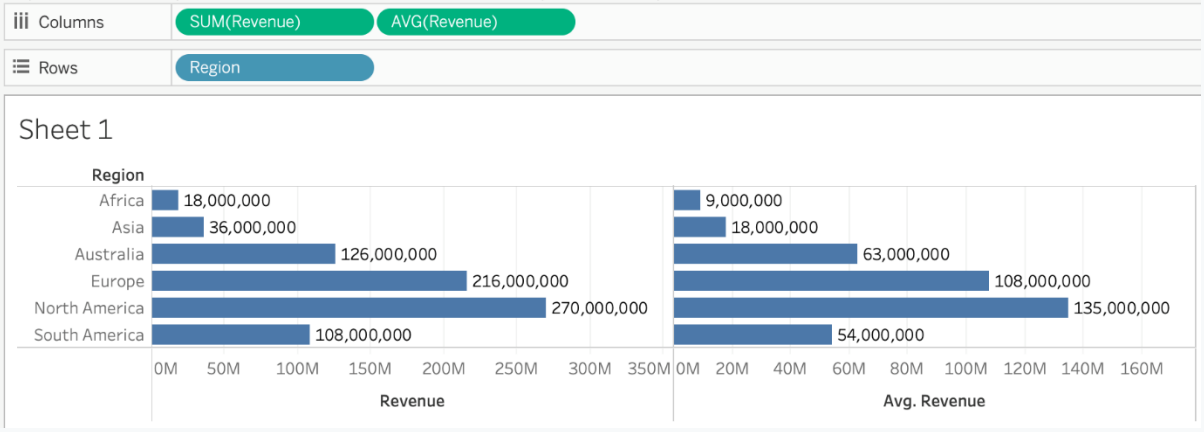
Reference: https://help.tableau.com/current/guides/everybody-install/en-us/everybody_admin_data.htm

Question 32: **Correct**
Is it possible to use measures in the same view multiple times (e.g. SUM of the measure and AVG of the measure)?

- **No**
- **Yes**

  (Correct)

Explanation
Yes, it is very much possible to use measures in the same view multiple times. For example, refer to the image below:



We are using **BOTH** the **Sum** of the revenue and the **AVG** of the revenue in the same view!

Question 33: **Correct**

Which of the following are compelling reasons to use a Stacked Bar Chart?

- ☐

  To visualize each discrete category using a separate bar.

- ☑

  To be able to visualize complex information with fewer bars / marks

  (Correct)

- ☑

  To visualize parts of a whole

  (Correct)

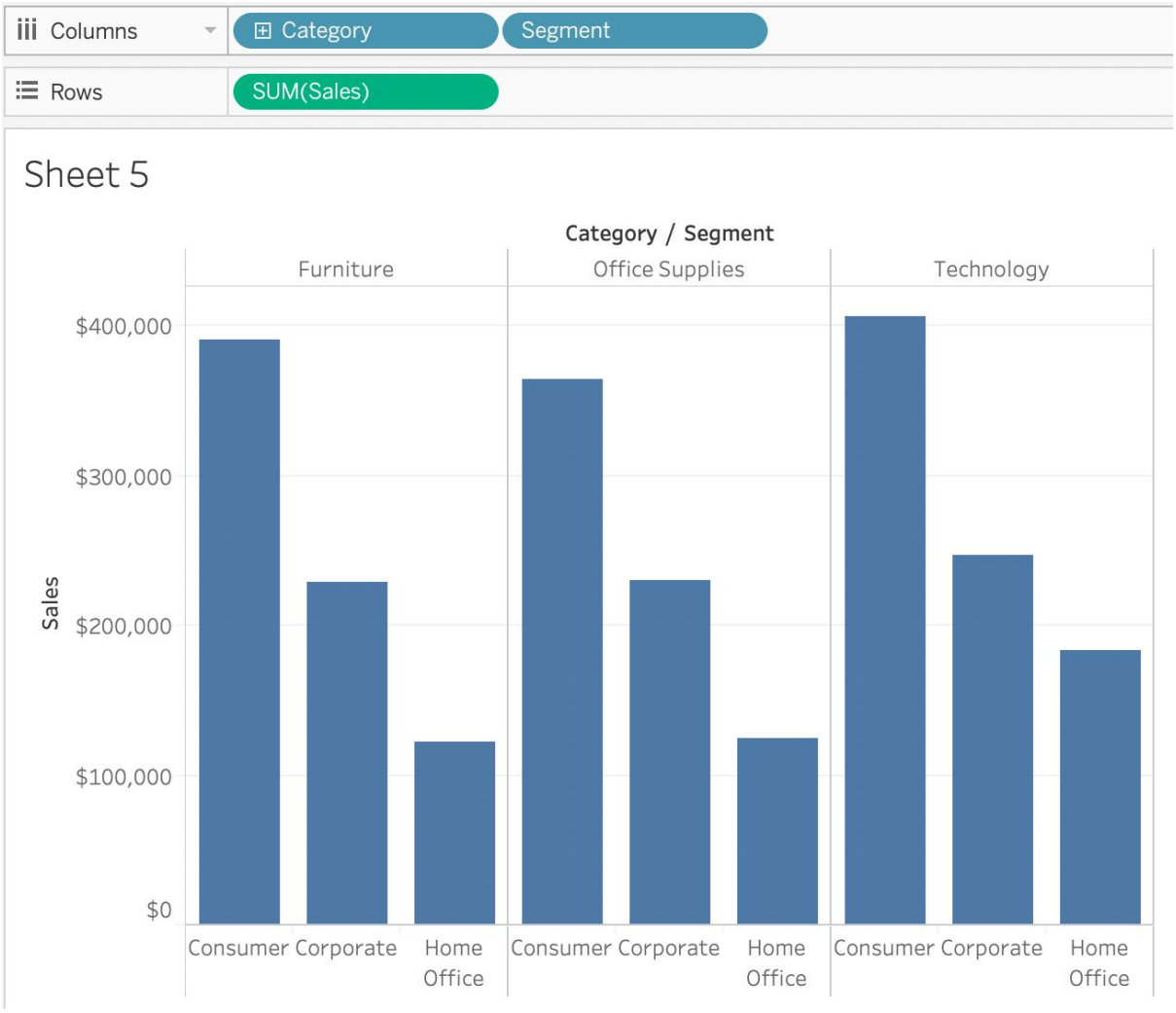
- ☐

  To easily visualize trends over time

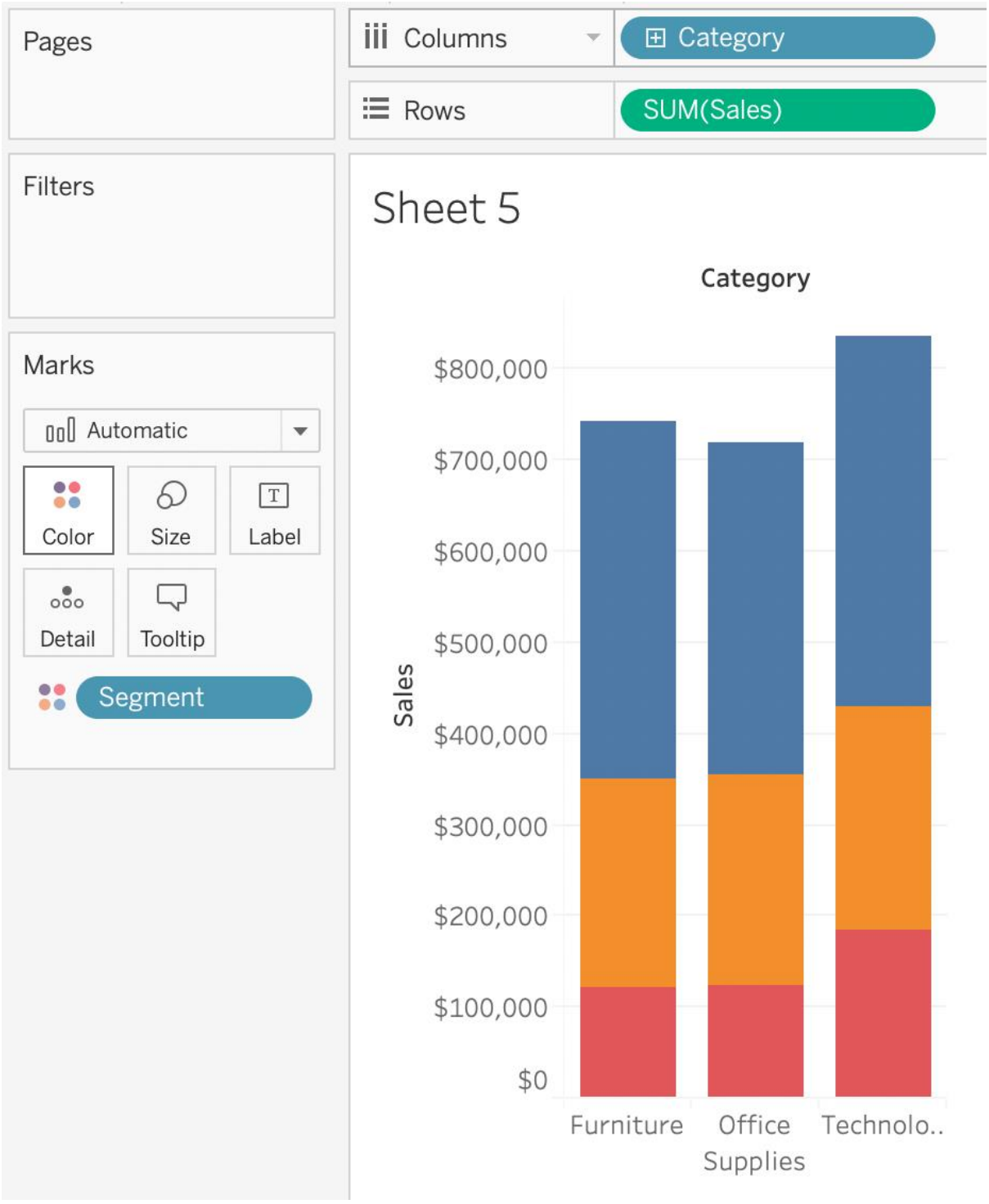
Explanation

Stacked bar charts will usually have lesser number of bars compared to a normal bar chart:

Normal bar chart - 9 bars



Stacked Bar Chart - 3 bars



We can easily see a 'part-of-a-whole' methodology being used here as well - we are seeing the breakdown of Segments within each Category.

To easily visualize trends over time - This is the definition of a line chart.

To visualize each discrete category using a separate bar - This can be accomplished using a simple bar chart, why use a stacked one?

Question 34: **Correct**
True or False : Bins can be created on dimensions

- **False**
- **True**

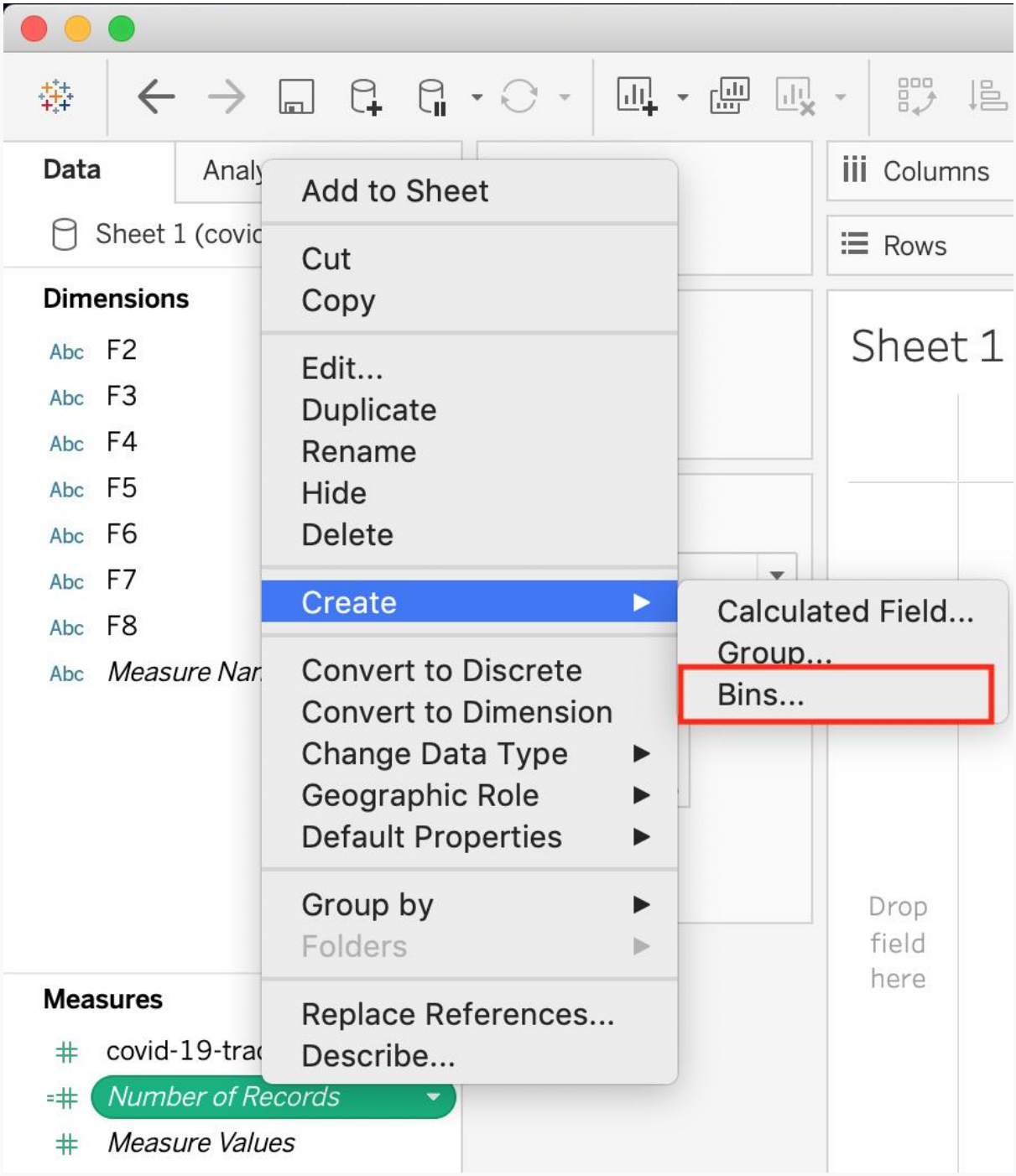
  (Correct)

Explanation
Tricky question!

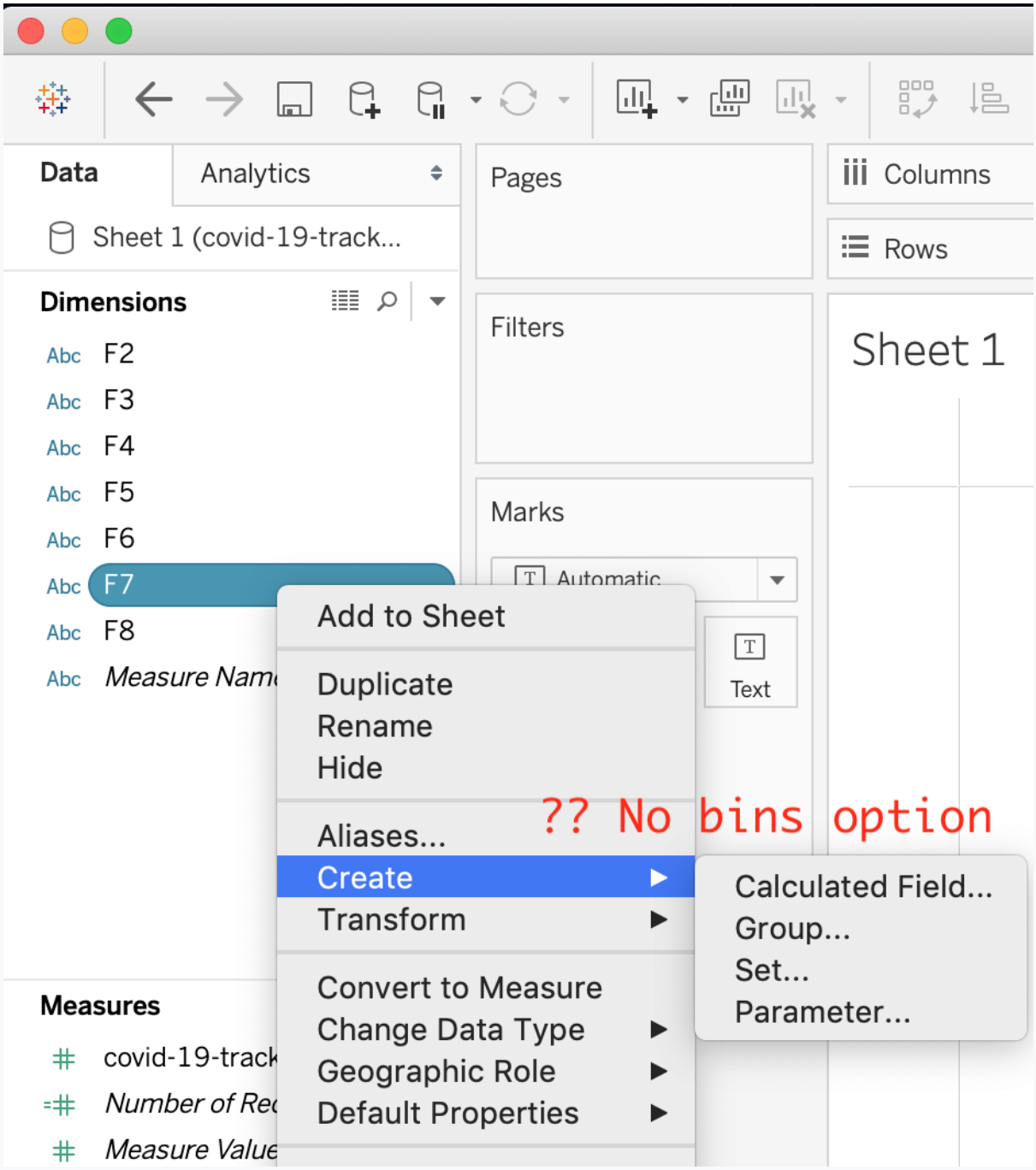
Bin are a user-defined grouping of **numerical data** in the data source.

According to the official Tableau documentation: It's sometimes useful to convert a continuous measure **(or a numeric dimension)** into bins.

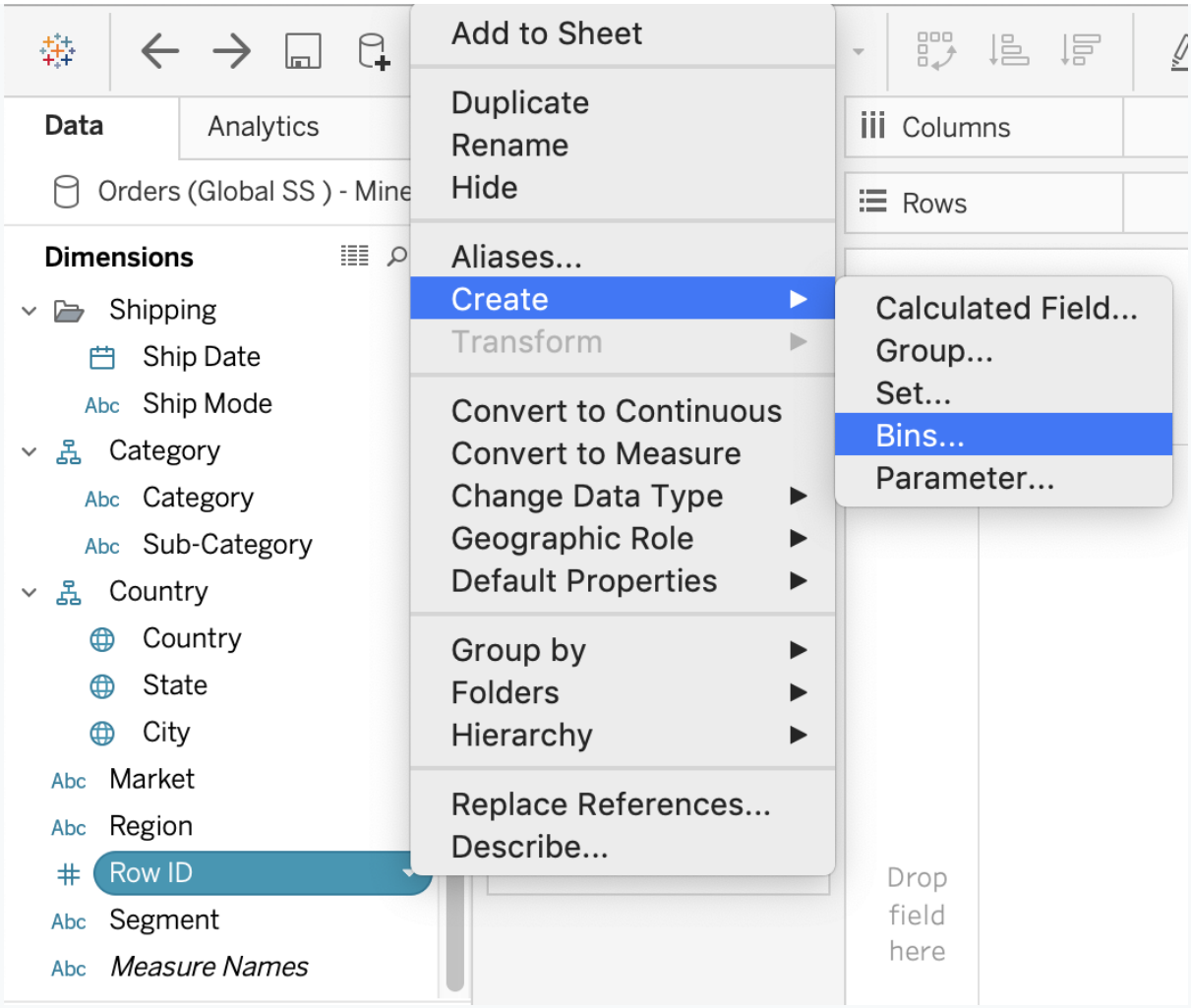
Have a look at the following image. When we right click a measure, we get the following options:



However, for a dimension (this is because the **DATA TYPE** of this dimension is a string:



But what if we have a dimension of type **NUMBER (NUMERIC DIMENSION)**? See below:



We can clearly create bins from dimensions too - they just have to be numeric :)

For more information, please refer to
: https://help.tableau.com/current/pro/desktop/en-us/calculations_bins.htm

Question 35: **Correct**

When you drop a continuous field on Color, Tableau displays a quantitative legend with a _____ range of colors.

- **Mixed**
-

Discrete

- ○

Fading

- ◉

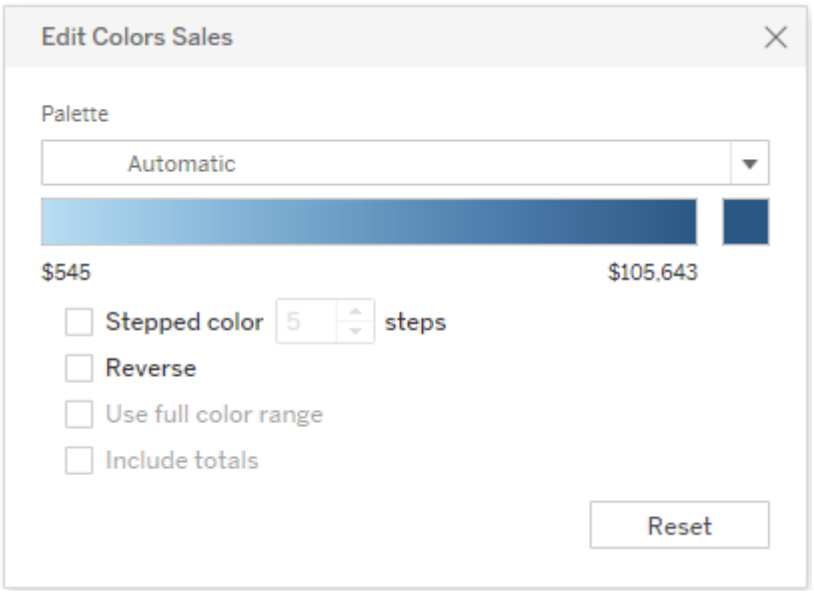
Continuous

(Correct)

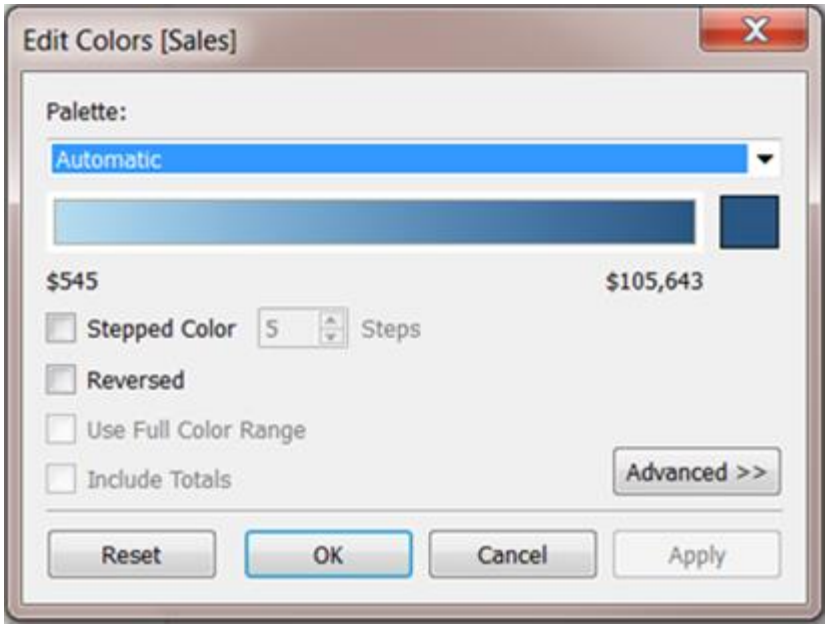
Explanation
When you drop a discrete field on Color in the Marks card, Tableau displays a **categorical** palette and assigns a color to each value of the field.

When you drop a continuous field on Color, Tableau displays a quantitative legend with a **continuous** range of colors.

Web version:



Desktop Version:



For more information about color palettes, see Color Palettes and Effects.

Question 36: **Correct**

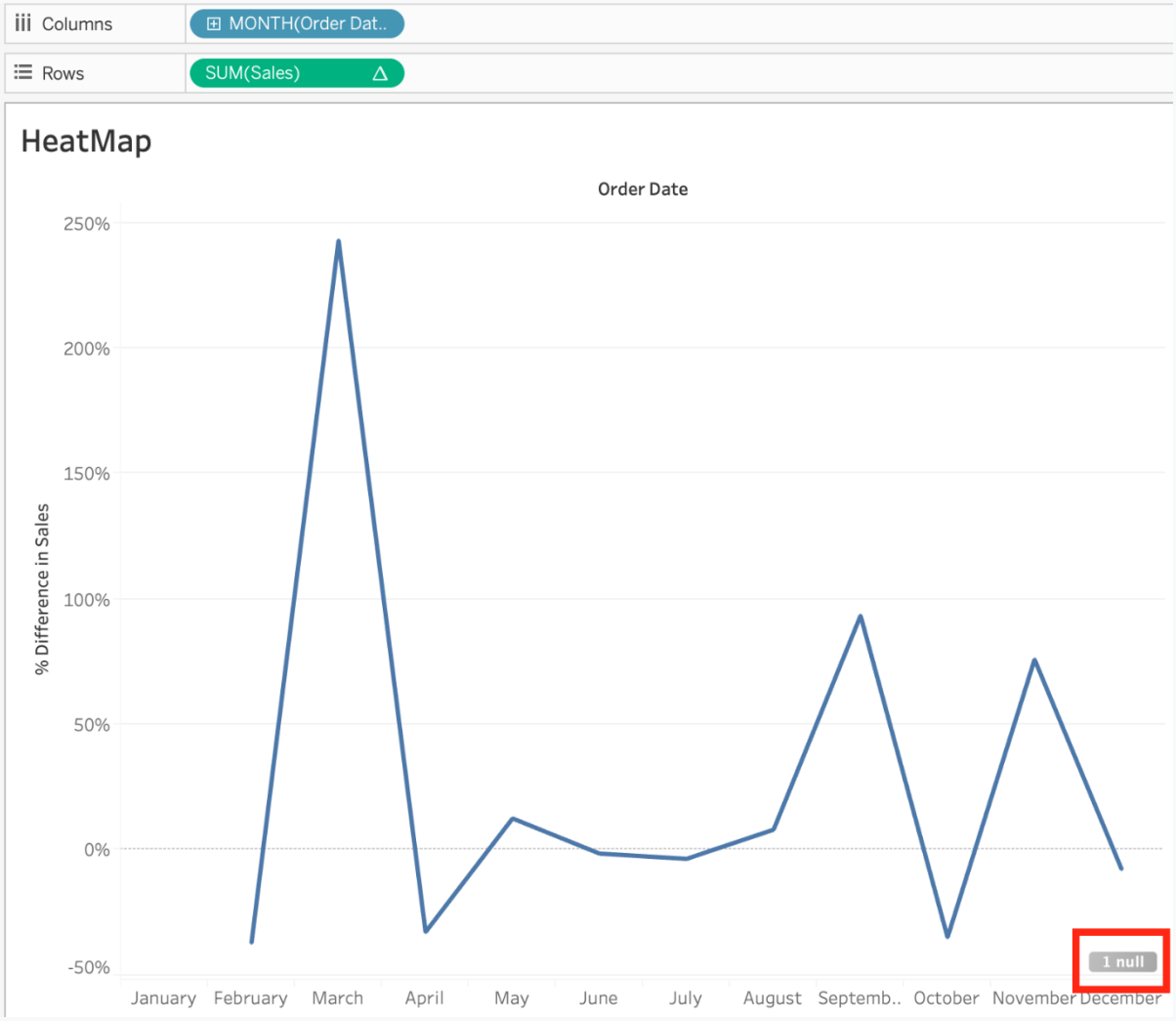
If you use a percent difference Quick Table Calculation, what value will be the first data value?

- **-1**
- **null**

  (Correct)
- **0000**
- **0**

Explanation

When using a Percent difference, Tableau calculates what the percent change has occured as compared to the last data value. **BUT, for the first data value, there is no previous value to compare it to. Hence, it appears as NULL.**



Question 37: **Correct**

Which of the following represent a valid method to create a Bullet Graph with the LEAST number of fields possible?

- **Using 2 dimensions and 3 measures**
- **Using 2 measures**

  (Correct)

- **Using 1 measure**
- **Using 2 dimensions**

Explanation

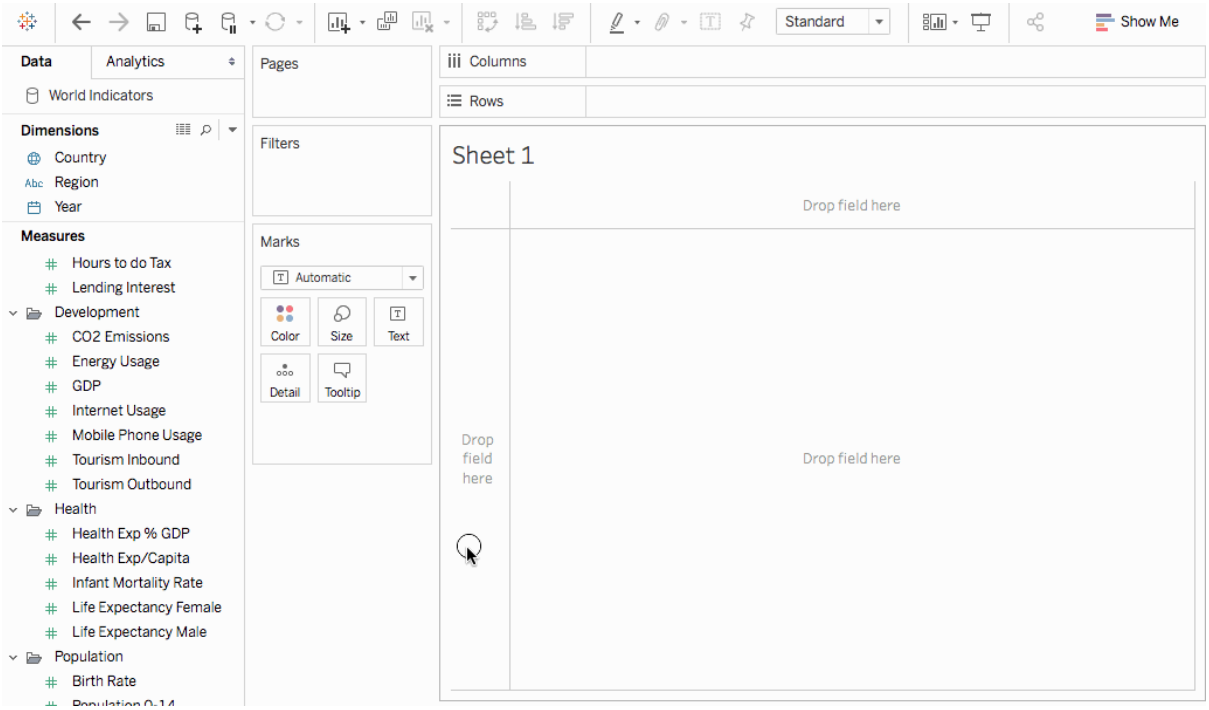
A bullet graph is a variation of a bar graph developed to replace dashboard gauges and meters. A bullet graph is useful for comparing the performance of a primary measure to one or more other measures. Below is a single bullet graph showing how actual sales compared to estimated sales.

We can create a Bullet graph with **just 2 measures!** This method requires the **LEAST** number of fields possible to create this type of chart.

The **best way** to tackle such questions in the exam is to click the **"SHOW ME"** button on top right, and hover over the chart we want to create.

In our case, it is a Bullet graph.


Show Me
For **bullet graphs** try
0 or more Dimensions
2 Measures
Right-click the continuous axis to swap reference lines



Therefore, we need 2 measures at least to create this chart, and 0 or more dimensions.

Reference: https://help.tableau.com/current/pro/desktop/en-us/qs_bullet_graphs.htm

Question 38: **Correct**

For Bullet Graphs we need at least _____ measures

- **2**

  (Correct)

- **3**

4

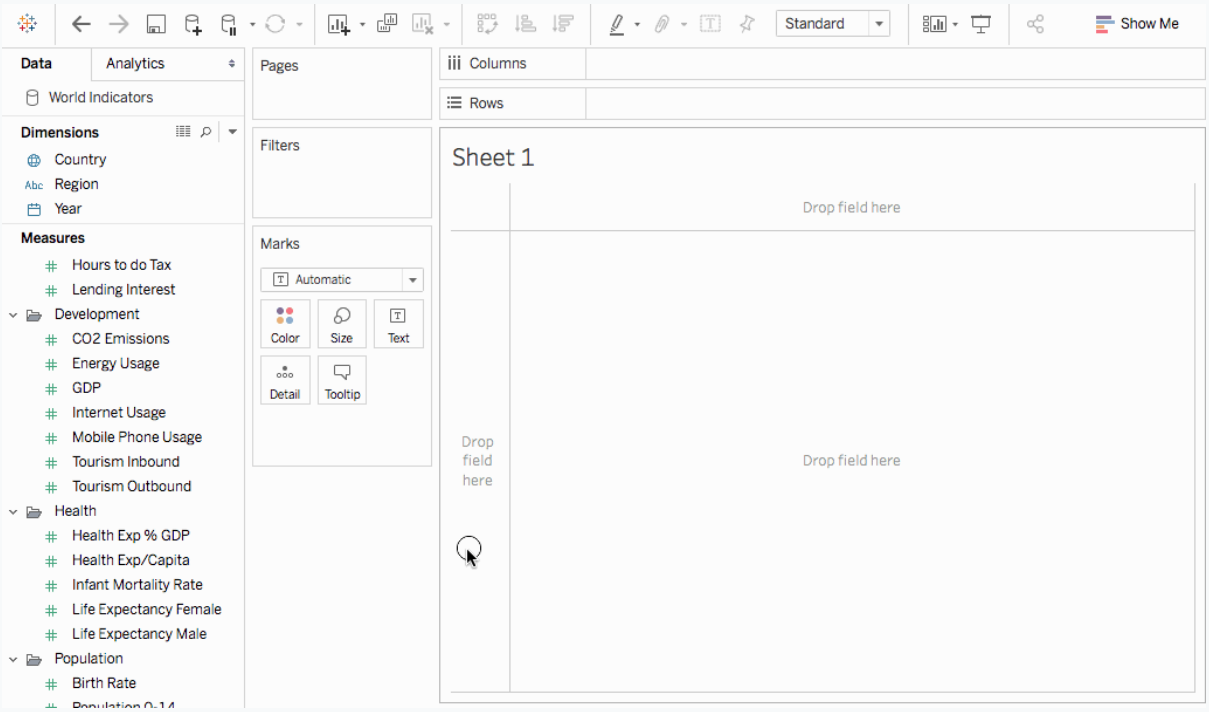
-

1

Explanation

A bullet graph is a variation of a bar graph developed to replace dashboard gauges and meters. A bullet graph is useful for comparing the performance of a **primary measure to one or more other measures.**

Therefore, we need at least 2 measures for creating bullet graphs.



Reference: https://help.tableau.com/current/pro/desktop/en-us/qs_bullet_graphs.htm

Question 39: **Correct**

Which of the following are benefits of using Data Extracts in Tableau?

- ☑

  Faster to work with

  (Correct)

- ☑

  Improved Performance

  (Correct)

- ☑

  Ability to use the data offline

  (Correct)

- ☐

  Working with freshest data at all times

Explanation
Extracts are advantageous for several reasons:

1) Supports large data sets: You can create extracts that contain billions of rows of data.

2) Fast to create: If you're working with large data sets, creating and working with extracts can be faster than working with the original data.

3) Help improve performance: When you interact with views that use extract data sources, you generally experience better performance than when interacting with views based on connections to the original data.

4) Support additional functionality: Extracts allow you to take advantage of Tableau functionality that's not available or supported by the original data, such as the ability to compute Count Distinct.

5) Provide offline access to your data: Extracts allow you to save and work with the data locally when the original data is not available. For example, when you are traveling.

To work with the MOST up-do-date data, use a live connection instead!

Reference: https://help.tableau.com/current/pro/desktop/en-us/extracting_data.htm

Question 40: **Correct**

Which of the following are stored in a .tds file? Choose 3.

- ☑ **Data Connection information**

  (Correct)

- ☐ **Data Extracts**

- ☑ **Metadata edits**

  (Correct)

- ☑ **Calculated Fields**

  (Correct)

- ☐ **Visualizations**

Explanation

If you've created a data connection that you might want to use with other workbooks or share with colleagues, you can export (save) the data source to a file. You might want to do this also if you've added joined tables, default properties, or custom fields—such as groups, sets, calculated fields, and binned fields—to the Data pane.

You can save a data source to either of the following formats:

 **Data Source (.tds)** – contains only the information you need to connect to the data source, including the following:

- Data source type
- Connection information specified on the data source page; for example, database server address, port, location of local files, tables
- Groups, sets, calculated fields, bins
- Default field properties; for example, number formats, aggregation, and sort order

Use this format if everyone who will use the data source has access to the underlying file or database defined in the connection information. For example, the underlying data is a CSV file on your computer, and you are the only person who will use it; or the data is hosted on a cloud platform, and your colleagues all have the same access you do.

Visualisations and Data extracts are NOT saved in a .tds file!

Reference: https://help.tableau.com/current/pro/desktop/en-us/export_connection.htm

Question 41: **Correct**

_____ refers to the level of detail for a piece of data, wherever you are looking.

- **Data Cleanliness**
- **Data connectivity**
- **Data granularity**

(Correct)

- **Data LOD**

Explanation
Data is generated and analyzed at many different levels of granularity. Granularity is the level of detail of the data. For example, when looking at graduation data, granularity would describe whether a row in the data set represents a single person or the graduating class of a university.

Reference: https://www.tableau.com/about/blog/2018/6/data-prep-101-what-aggregate-function-and-how-do-you-combine-aggregated-data-89244

Question 42: **Correct**
By definition, Tableau displays measures over time as a _____

- **Line**

  (Correct)

- **Bar**

- **Stacked Bar**

- **Packed Bubble**

Explanation
Line charts connect individual data points in a view. They provide a simple way to visualize a sequence of values and are useful when you want to see trends over time, or to forecast future values.

Please refer to the images below:

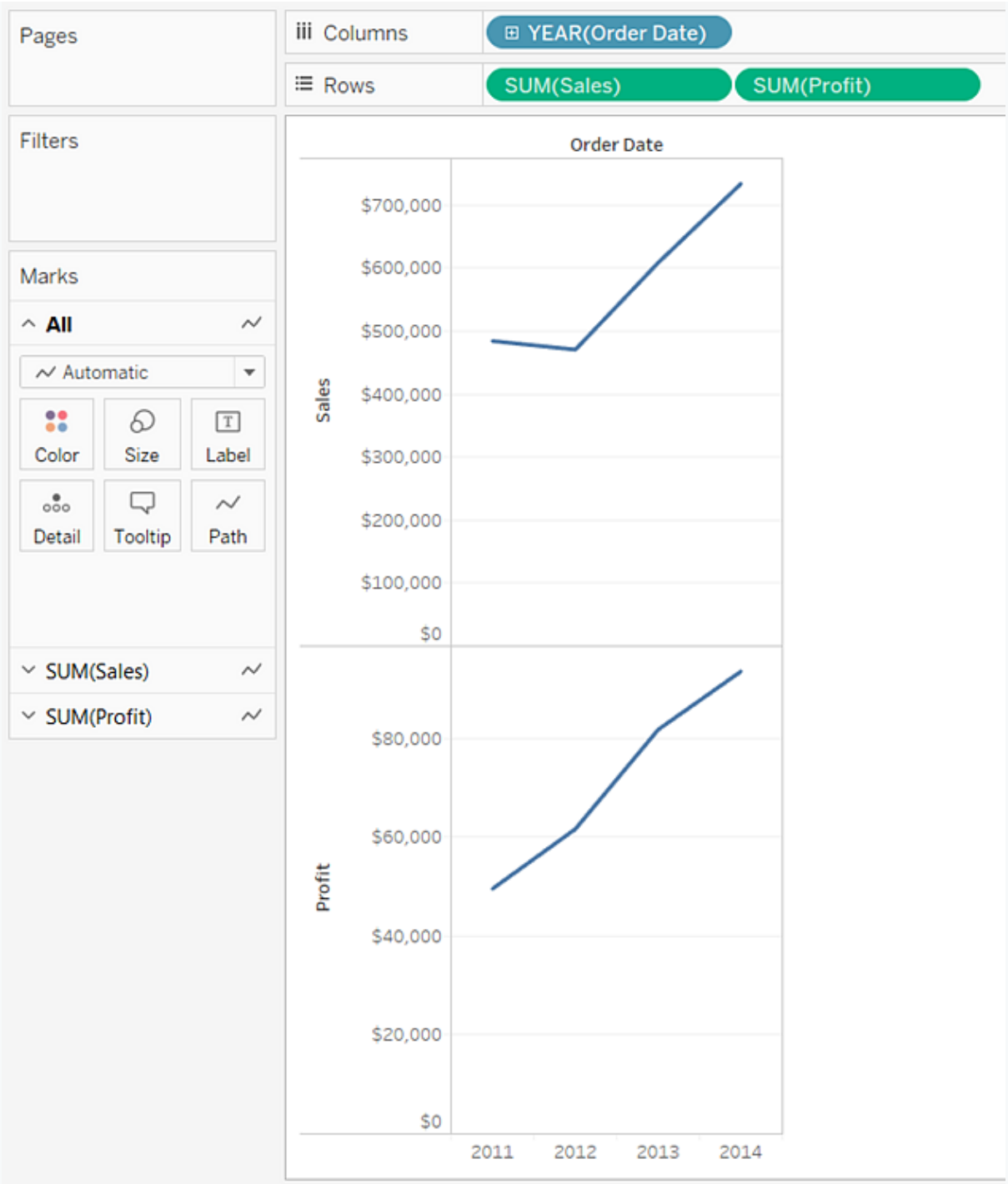
To create a view that displays the sum of sales and the sum of profit for all years, and then uses forecasting to determine a trend, follow these steps:

1. Connect to the **Sample - Superstore** data source.
2. Drag the **Order Date** dimension to **Columns**.

   Tableau aggregates the date by year, and creates column headers.
3. Drag the **Sales** measure to **Rows**.

   Tableau aggregates **Sales** as SUM and displays a simple line chart.
4. Drag the **Profit** measure to **Rows** and drop it to the right of the **Sales** measure.

   Tableau creates separate axes along the left margin for **Sales** and **Profit**.



Reference: https://help.tableau.com/current/pro/desktop/en-us/buildexamples_line.htm

Question 43: **Correct**

Which of the following is true about 'Incremental refresh' when creating Extracts in Tableau?

- **It replaces all of the contents in the extract**
- **There is no difference, both are the same when using extracts. They are different when using live connections.**
- **It only adds rows that are new since the previous refresh.**

  (Correct)
- **They can only be used with large datasets**

Explanation
Imp question!

Extracts are saved subsets of data that you can use to improve performance or to take advantage of Tableau functionality not available or supported in your original data. When you create an extract of your data, you can reduce the total amount of data by using filters and configuring other limits. After you create an extract, you can refresh it with data from the original data.

When refreshing the data, you have the option to either do a full refresh, which replaces all of the contents in the extract, or you can do an incremental refresh, which only adds rows that are new since the previous refresh.

Reference: https://help.tableau.com/current/pro/desktop/en-us/extracting_data.htm

Question 44: **Correct**
Which of the following can you use to create a Histogram?

- **2 dimensions**

- 1 dimension
- 2 measures
- 1 measure

  (Correct)

Explanation
A histogram is a chart that displays the **shape** of a distribution. A histogram looks like a bar chart but groups values for a **continuous measure** into ranges, or bins.

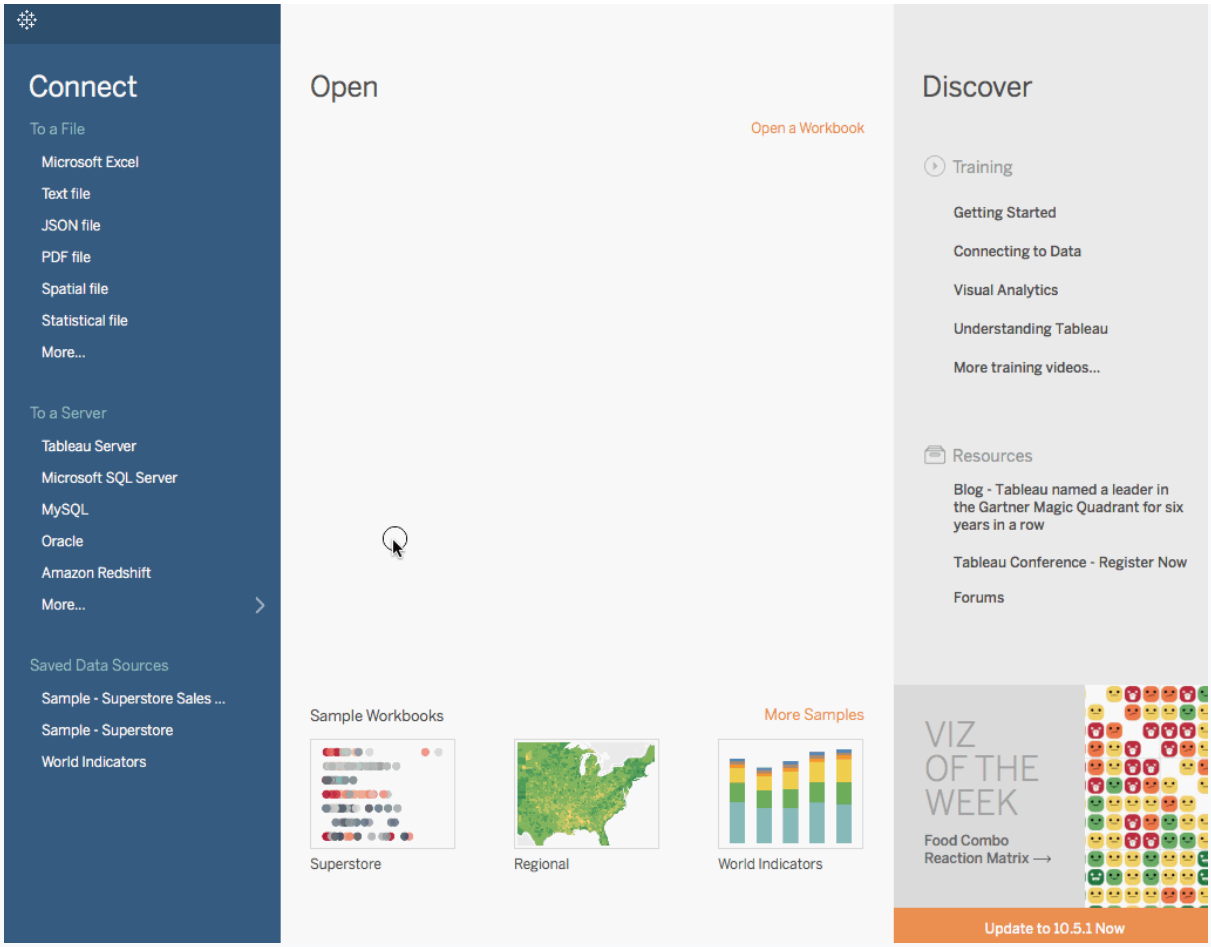
The basic building blocks for a histogram are as follows:

Mark type:	Automatic
Rows shelf:	Continuous measure (aggregated by Count or Count Distinct)
Columns shelf:	Bin (continuous or discrete). ***Note**: This bin should be created from the continuous measure on the Rows shelf. For more information on how to create a bin from a continuous measure, see Create Bins from a Continuous Measure.*

In Tableau you can create a histogram using **Show Me**.

1. Connect to the **Sample - Superstore** data source.
2. Drag **Quantity** to **Columns**.
3. Click **Show Me** on the toolbar, then select the histogram chart type.

Demo :



Reference: https://help.tableau.com/current/pro/desktop/en-us/buildexamples_histogram.htm

Question 45: **Correct**

Which of the following would you use to connect to multiple tables in a single data source at once?

- **A Blend**
- **A Set**
-

A Hierarchy

- ◉

A Join

(Correct)

Explanation
The data that you analyze in Tableau is often made up of a collection of tables that are related by specific fields (that is, **columns**). Joining is a method for combining data on based on those common fields. The result of combining data using a join is a virtual table that is typically **extended** horizontally by adding columns of data.

For example, consider the following two tables originating from a single data source:

Table 1

ID	First Name	Last Name	Publisher Type
20034	Adam	Davis	Independent
20165	Ashley	Garcia	Big
20233	Susan	Nguyen	Small/medium

Table 2

Book Title	Price	Royalty	ID
Weather in the Alps	19.99	5,000	20165
My Physics	8.99	3,500	20800
The Magic Shoe Lace	15.99	7,000	20034

We can combine these 2 tables, simply by joining the tables on ID to answer questions like, "How much was paid in royalties for authors from a given publisher?". By combining tables using a join, you can view and use related data from different tables in your analysis.

ID	First Name	Last Name	Publisher Type	Book Title	Price	Royalty
20034	Adam	Davis	Independent	The Magic Shoe Lace	15.99	7,000
20165	Ashley	Garcia	Big	Weather in the Alps	19.99	5,000

Reference: https://help.tableau.com/current/pro/desktop/en-us/joining_tables.htm