# Money Back Guarantee

Vendor: Tableau

Exam Code: TDS-C01

Exam Name: Tableau Desktop Specialist

Version:Demo

True or False: A reference line cannot be added from the Analytics Pane

#### A. True

B. False

Correct Answer: B

You can add a reference line to any continuous axis in the view.

To add a reference line:

Drag Reference Line from the Analytics pane into the view. Tableau shows the possible destinations. The range of choices varies depending on the type of item and the current view.

In a simple case, the drop target area offers three options:



Reference: https://help.tableau.com/current/pro/desktop/en-us/reference\_lines.htm

#### **QUESTION 2**

Using the CoffeeChain table, create a crosstab showing the Total Expenses per State and add Column Grand Totals to the view. Now group the states of New York, California and Washington. What percent of the total sales does this group contribute?

A. 25.79%

B. 23.39%

C. 27.73%

D. 29.49%

Correct Answer: C

We need to use the concept of Groups for this question. Follow along:

1) First, Drag State to the Rows shelf, and Total Expenses to the Text Mark on the Marks Shelf:

Pages	iii Columns	
	I Rows	State
Filters	Sheet 1	
	State	anteres atomore
	California	23,222
larks 🔹	Colorado	12,143
T Automatic -	Connecticut	8,096
T Automatic	Florida	11,009
6 I	Illinois	13,653
Color Size Text	Iowa	11,838
• •	Louisiana	7,182
	Massachusetts	6,765
Detail Tooltip	Missouri	9,641
T SUM(Total Exp.	Nevada	18,586
	New Hampshire	6,606
	New Mexico	7,243
	New York	17,637
	Ohio	10,251
	Oklahoma	8,577
	Oregon	12,448
	Texas	8,000
	Utah	12,409
	Washington	12,849
	Wisconsin	11,507

2) Now, remove the SUM aggregation from Total Expenses, and add a quick table calculation-> Percent of total: 3) Next, Select the States of New York, California and Washington-> And then click the paperclip icon:

			California		23,222		
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Pages			iii Columns	
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Filters			Sheet 1	
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			California	10.111%
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			Connecticut	3.525%
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			New Hampshire	e 2.876%
			New Mexico	3.154%
			New York	7.680%
			Ohio	4.464%
			Oklahoma	3.735%
			Oregon	5.420%
			Texas	3.483%
			Utah	5.403%
			Washington	5.595%
			Wisconsir 🗸 K	Keep Only 🗙 Exclude 😫 🎫 🖉 📀 🕶 🏢
			3 ite	ems selected • % of Total SUM(Total Expenses): 23.386%
			Was	shington

We can see the answer already : 23.386% in the view above (even before grouping!)

4) Finally, we get the following view and our answer:

#### **QUESTION 3**

You may create a context filter to:

A. To create a dependent filter

B. Improve performance

C. To replace a data source filter

D. Create a dependent numerical or top N filter

Correct Answer: BD

Important question! You cannot use a context filter to replace a data source filter since each filter type has its own use case. Also, a content filter is an Independent filter and all other filters are called dependent since they only process the data that passes through a context filter.

According to the official documentation : Reference: https://help.tableau.com/current/pro/desktop/en-us/filtering\_context.htm

# Improve View Performance with Context Filters

Version: 2020.3

Applies to: Tableau Desktop, Tableau Online, Tableau Server

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:

- 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.
- 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.

For example, suppose you're in charge of breakfast products for a large grocery chain. Your task is to find the top 10 breakfast products by profitability for all stores. If the data source is very large, you can set a context filter to include only breakfast products. Then you can create a top 10 filter by profit as a dependent filter, which would process only the data that passes through the context filter.

**Note**: As of Tableau 9.0, context filters no longer create temporary tables, except for generic ODBC data sources and customized data sources.

## **Create Context Filters**

To create a context filter, select **Add to Context** from the context menu of an existing categorical filter. The context is computed once to generate the view. All other filters are then computed relative to the context. Context filters:

- Appear at the top of the Filters shelf.
- Are identified by a gray color on the Filters shelf.
- Cannot be rearranged on the shelf.

As shown below, the **Ship Mode** dimension is set to be the context for a view. The **Region** filter is computed using only the data that passes through **Ship Mode**.

You can modify a context filter by:

- Removing the field from the Filters shelf If other context filters remain on the shelf, a new context is computed.
- Editing the filter A new context is computed each time you edit a context filter.
- Selecting **Remove from Context** The filter remains on the shelf as a standard filter. If other context filters remain on the shelf, a new context is computed.

### Speed up Context Filters

To improve performance of context filters, especially on large data sources, follow these general rules.

- Using a single context filter that significantly reduces the size of the data set is much better than applying many context filters. In fact, if a filter does not reduce the size of the data set by one-tenth or more, it is actually worse to add it to the context because of the performance cost of computing the context.
- Complete all of your data modeling before creating a context. Changes in the data model, such as converting dimensions to measures, require recomputing the context.
- Set the necessary filters for the context and create the context before adding fields to other shelves. Doing this work first makes the queries that are run when you drop fields on other shelves much faster.
- If you want to set a context filter on a date you can use a continuous date. However, using date bins like YEAR(date) or context filters on discrete dates are very effective.

#### **QUESTION 4**

You have a bar chart that has a dimension on the Columns shelf and a measure on the Rows shelf. How can you make a stacked bar chart?

- A. Drag another measure to Color on the Marks card.
- B. Drag another measure to the left of the measure on the Rows shelf.
- C. Drag another dimension to Size on the Marks card.
- D. Drag another dimension to Color on the Marks card.

Correct Answer: D

Add another dimension to Color Marks Card

#### **QUESTION 5**

Using the dataset, create a bar chart showing the average Quantity broken down by Region, and filtered by Country to only show Japan. What was the average Quantity in the State of Tokyo?

A. 3.000

B. 3.840

C. 3.704

D. 3.500

Correct Answer: C

Since we need to focus on 1 country-> Japan, let\\'s filter on it first as follows: 1) Drag Country to the filter shelf, and choose only Japan. Click OK.

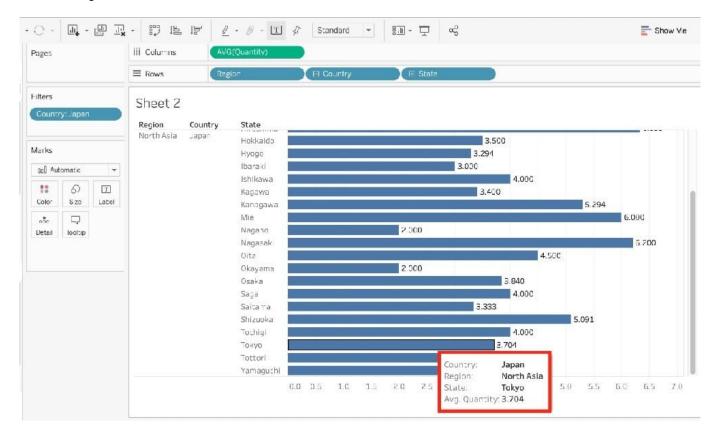
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2) Read the Question Carefully, we need to break down the visualisation by Region, then by Country, and then by State. So let\\'s do that:

Drag Region to the column shelf, followed by Country. Drill down into Country to include states as well.

Then drag Quantity to the Row Shelf, and change the Aggregation to AVERAGE.

#### The following is our visualisation:



Now that you think of it, EVEN IF YOU REMOVE THE REGION, THE ANSWER REMAINS THE SAME. Such elements will be present in the actual exam too, just to make the question sound a little difficult, but actually it is pretty straightforward

#### **QUESTION 6**

You have the following legend.



What occurs when you click the icon to the right of Air Ticketing Cabin Type Name?

- A. The legend toggles on or off
- B. The highlighter toggles on or off
- C. The filter options open
- D. The Edit Colors dialog box opens

Correct Answer: B

#### **QUESTION 7**

Which of the following are correct ways to define a join in Tableau version 2020.3 and above?

A. Right-click a logical table and click on open to go to the Join/Union canvas in the physical layer and add joins or unions.

B. Double-click a physical table to go to the Join/Union canvas in the logical layer and add joins or unions.

C. Right-click a physical table and click on open to go to the Join/Union canvas in the logical layer and add joins or unions.

D. Double-click a logical table to go to the Join/Union canvas in the physical layer and add joins or unions.

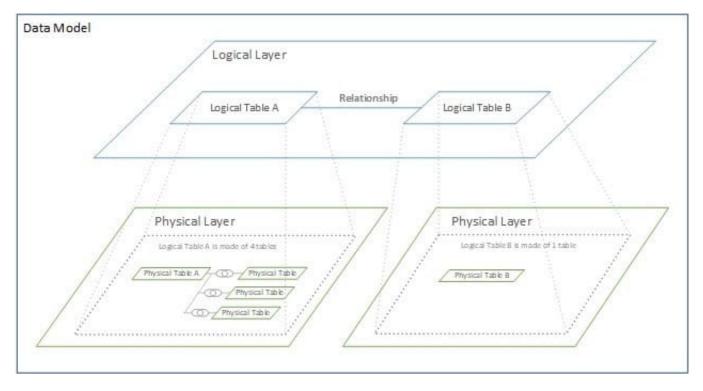
Correct Answer: AD

Remember that joins are defined in the physical layer and relationships in the logical layer.

You can still specify joins between tables in the physical layer of a data source. Double-click a logical table to go to the Join/Union canvas in the physical layer and add joins or unions. Every top-level, logical table contains at least one physical table. Open a logical table to view, edit, or create joins between its physical tables. Right-click a logical table, and then click Open. Or, just double-click the table to open it.

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81	New Union		

When you create a data source, it has two layers. The top-level layer is the logical layer of the data source. You combine data between tables in the logical layer using relationships. The next layer is the physical layer of the data source. You combine data between tables at the physical layer using joins. For more information, see Logical and physical tables in the data model



Reference: https://help.tableau.com/current/online/en-us/datasource\_relationships\_learnmorepage.htm

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

A. null

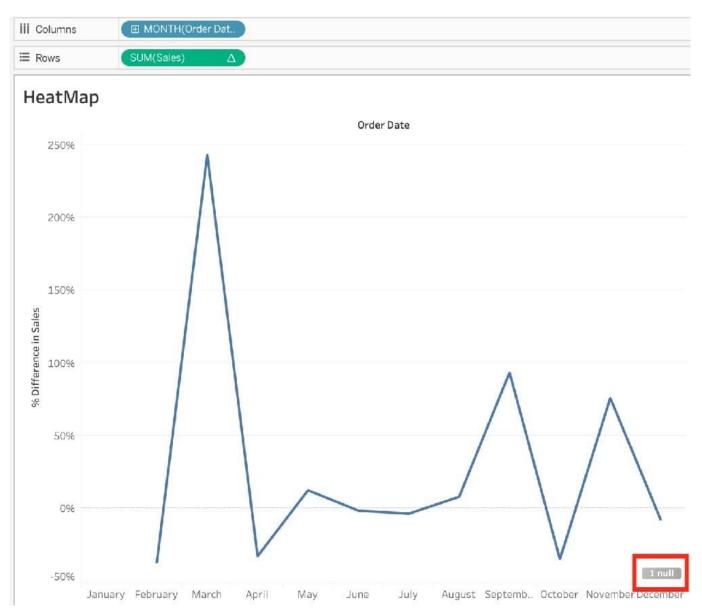
B. -1

C. 0000

D. 0

Correct Answer: A

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.

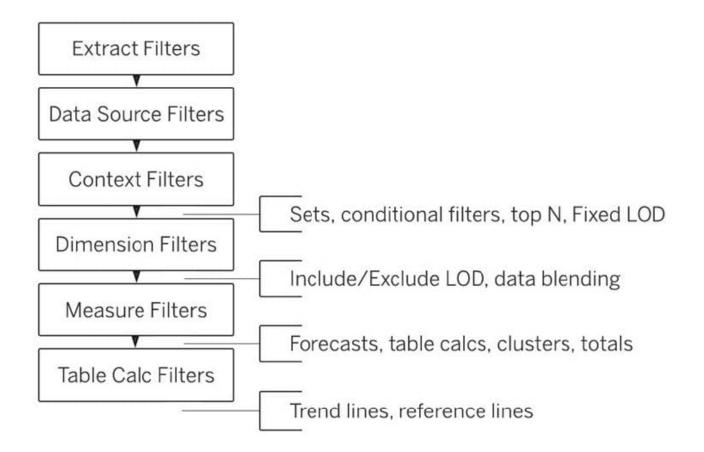


Our use case states that we need to create a set showing the Bottom 10 products by Profit in each Region. Which of the following filter types should you apply on Region?

- A. Measure Filters
- **B.** Context Filters
- C. Extract Filters
- D. Dimension Filters

Correct Answer: B

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



#### Diagram

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.

Dimensions III O Country/Region Country/Region City Postal Code Product Abc Category Abc Sub-Category Abc Sub-Category Abc Product Name 	Data     Analytics       Sample - Superstore	Name: Bottom Pr	oducts		
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# Top Customers	# Profit Bin Size				
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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.

Pages		iii Columns						
			⊞ Rows	Region	Bottorn Products @			
liters			Salasf	or each Category				Reg on
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				Chromoraft Bull-Nose Wo.		-\$2,865		
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				Cubify CubeX 3D PrinterT		-\$3,840		
				GBC DocuBind P400 Electr.		-\$1,307		
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3) Now, try to only visualize the data for the South Region:

Pages		III Columns				
			≡ Rows	Region Bottom Product	@ z	
liters			Salos f	or each Category		Region
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T SUM	(Profit)					

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:

ages	iii Column	15				
	⊞ Rows	Region Bottom Product	s Ø			
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Edit Hiter		Balt Solid Wood Round Ta	-\$069	East		
√ Show Filter		BoxOffice By Design Rect.	-\$420	South		
Show Highlighter		Bush Advantage Collectio\$1,111		West		
Clear Filter	_	Chromcraft Bull-Nose Wo	-\$2,865			
Add to Context		Cisco TelePresence Syste	-\$1,811			
Apply to Worksheets		Cubify CubeX 3D Printer T.	-\$3,840			
F Sort		GBC DocuBind P400 Electr	-\$1,307			
		Martin Yale Chadless Ope	\$117			
Create Set						
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Upon doing this, we get the correct answer as :

			i≣ Rows	Region Bottam Prod	ucts 💿	
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	n Product	1× 0	Region	Bottom Products		Central
Cotton	in radiati		South	3D Systems Cube Printer,	-\$572	East
				Balt Solid Wood Round Ta.,	-\$969	South
Marks	/arks			BPI Conference Tables	-\$469	West
				Bush Advantage Collectio.	-\$1,111	
T Au	tomatic	*		Chromeraft Bull-Nose Well.	-\$2,865	
**	Ð	T		Cisco TelePresence Syste.	\$1,811	
Color	Size	Text		Cubify CubeX 3D Printer T.,	\$3,840	
				GBC DocuBind P400 Electr	-\$1,307	
000	$\Box$			GBC Ibimaster 500 Manua.	-\$1,979	
Detail	Taoltip			Hon Racetrack Conference	-\$648	

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 10**

What are two use cases for creating hierarchies from the Data pane? (Choose two.)

- A. To organize related fields together
- B. To add drilldown functionality for fields
- C. To create faster-performing queries
- D. To concatenate all fields into a single field

Correct Answer: AB

True or False: Context Filters are executed after Data Source filters

A. True

B. False

Correct Answer: A

THIS IS A VERY IMPORTANT

#### **QUESTION 12**

A. parameters

B. sets

C. values

D. inputs

Correct Answer: A

A URL action is a hyperlink that points to a web page, file, or other web-based resource outside of Tableau. You can use URL actions to create an email or link to additional information about your data. To customize links based on your data, you can automatically enter field values as parameters in URLs.

Read more in depth at : https://help.tableau.com/current/pro/desktop/en-us/actions\_url.htm