



# **Desktop Specialist**

Exam Guide

This document provides information on the structure of the exam, along with the knowledge and skills being measured. It will also guide you to resources to help you prepare for success. This document is not intended to build product knowledge.

## Awarded Credentials

Upon successful completion of this exam, you will be awarded the title of Tableau Desktop Specialist. This title does not expire.

## Target Audience

This exam is for those who have foundational skills and understanding of Tableau Desktop and at least three months of applying this understanding in the product.

There are no required prerequisites for this exam. Everyone learns differently and every day use of Tableau varies. Recommendations for learning resources and experience with the product are guidelines, not requirements.

## Learning Resources

The best preparation is experience and time with the product. During the exam, you will have access to public, online resources aside from private websites that require a login or websites & applications allowing for communication with others. To be successful, we strongly encourage you to complete the [Desktop I: Fundamentals](#) classroom course.

We also recommend exploring these additional resources:

- [Tableau Starter Kits](#)
- [Free How-To Training Videos](#)
- [Tableau Product Support](#)
- [Tableau Product Help](#)
- [Visual Analysis Best Practices Guidebook](#)

## Exam Format

**Time Limit:** 60 minutes

**Question Format:** Multiple choice, multiple response, hands-on

**Number of Questions:** 30

**Scoring:** Automatically scored; point value varies per question type with hands-on worth more

**Passing Score:** 70%

**Language(s) Offered:** English, Japanese, Simplified Chinese, German, French, Brazilian Portuguese, International Spanish

**Delivery Platform:** Windows Virtual Machine containing Tableau Desktop

## System Preparation

For a successful exam experience, ensure your computer, network, and the physical environment are properly configured. This includes running a system tech-check before the exam. Review our [Required: Exam Setup](#) document for complete details.

For questions, email [certification@tableau.com](mailto:certification@tableau.com) or visit [tableau.com/certification](https://tableau.com/certification).

# Skills Measured

## Connecting to & Preparing Data

- Create and save data connections
  - Create a live connection to a data source
  - Explain the differences between using live connections versus extracts
  - Create an extract
  - Save metadata properties in a .TDS
- Modify data connections
  - Add a join
  - Add a blend
  - Add a union
- Manage data properties
  - Rename a data field
  - Assign an alias to a data value
  - Assign a geographic role to a data field
  - Change data type for a data field (number, date, string, boolean, etc.)
  - Change default properties for a data field (number format, aggregation, color, date format, etc.)

## Exploring & Analyzing Data

- Create basic charts
  - Create a bar chart
  - Create a line chart
  - Create a scatterplot
  - Create a map using geographic data
  - Create a combined axis chart
  - Create a dual axis chart
  - Create a stacked bar
  - Create a chart to show specific values (crosstab, highlight table)
- Organize data and apply filters
  - Create a visual group
  - Create a group using labels

- Create a set
- Organize dimensions into a hierarchy
- Add a filter to the view
- Add a context filter
- Add a date filter
- Apply analytics to a worksheet
  - Add a manual or a computed sort
  - Add a reference line or trend line
  - Use a table calculation
  - Use bins and histograms
  - Create a calculated field (e.g. string, date, simple arithmetic)
  - Add a parameter

## Sharing Insights

- Format view for presentation
  - Use color
  - Use bolding
  - Use shapes
  - Change size of marks
  - Select fonts
- Create and modify a dashboard
  - Create a dashboard layout
  - Add interactive or explanatory elements
  - Add dashboard actions
  - Modify existing dashboard layout for mobile devices
  - Create a story using dashboards or views
  - Share a twbx as a PDF
  - Share a twbx as an image

# Skills Measured

## Understanding Tableau Concepts

- Dimensions and measures
  - Explain what kind of information dimensions usually contain
  - Explain what kind of information measures usually contain
- Discrete and continuous fields
  - Explain how discrete fields are displayed in Tableau
  - Explain how continuous fields are displayed in Tableau
  - Explain the difference between discrete date

parts and continuous date values in Tableau

- Aggregation
  - Explain why Tableau aggregates measures
  - Describe how an aggregated measure changes when dimensions are added to the view

## Timeliness

Completing a task effectively and efficiently has become a standard that organizations expect from employees. This exam is timed because we view time as a critical competency needed to be successful.

# Sample Questions

The questions below are examples intended to give you a sense of how questions will look on the exam. It is not a learning resource for the Desktop product, nor does it provide the experience needed to successfully pass the exam.

You are encouraged to work through your own solutions first before looking at the solutions provided.

1. Which of the following is the best reason to use an extract instead of a live connection?
  - a. Your data source only supports a live connection via ODBC.
  - b. You need the freshest possible data at all times.
  - c. You need to apply an aggregation that takes too long when using a live connection.
  - d. You need to join tables that are in the data source.
  
2. You created a group by selecting field labels in a view. How can you remove members from the group?
  - a. In the view, right-click the group members you want to remove and select Exclude.
  - b. In the Data pane, right-click the group and select Edit Group.
  - c. In the view, right-click the group members you want to remove and select Format.
  - d. On a color legend, right-click a member you want to remove and select Format legends.
  
3. Which of the following can you use to create a calculated field that returns data independent of the data granularity in a view?
  - a. An INCLUDE LOD calculation
  - b. A table calculation
  - c. A basic calculation
  - d. A FIXED LOD calculation
  
4. Interactive elements that you can add to a dashboard for users include \_\_\_\_\_. (Select all that apply.)
  - a. URL actions
  - b. edit tooltip options
  - c. filter actions
  - d. hide and unhide all sheet options
  
5. A field that shows average home values for the United States in 2016 is most likely:
  - a. A discrete date part dimension
  - b. A continuous date value dimension
  - c. A geographical dimension
  - d. An aggregated measure

The following questions use the tables in the **tds\_sample\_data\_all.xlsx** file, which can be [downloaded here](#). If you are unable to download the file, try accessing it from another internet browser.

6. Using the **Stocks 2010–2013** table, create a chart to see the monthly change in volumes of stocks, beginning of 2010 to the end of 2013. Which two consecutive months saw the least fluctuation in increase or decrease?

- a. December 2011 – January 2012
- b. March 2012 – April 2012
- c. November 2012 – December 2012
- d. January 2012 – February 2012

7. Using the **Stocks 2010–2013** table, create a crosstab showing the sum of Volume per Company per Year, then add grand totals to the view. What was the total volume for Apple in 2013 and the total volume for Apple for 2010 through 2013, respectively?

- a. 25,606,397,999 and 127,322,019,216
- b. 25,606,397,999 and 26,695,067,569
- c. 26,695,067,569 and 134,264,642,523
- d. 365,212,953 and 134,264,642,523

8. Using the **Stocks 2010–2013** table, create a chart that shows the percent difference in Volume for each company by year and quarter. How many quarters did Biogen Idec show a positive percent difference in volume?

- a. 1
- b. 2
- c. 5
- d. 6

9. Union the **Stocks 2010–2013** and **Stocks 2014** tables, and then create a chart showing the average Close price by year and quarter for each Company from 2010 to 2014. How many quarters was Amazon's average closing price over \$300?

- a. 0
- b. 4
- c. 5
- d. 6

10. Using the **Flights** table, create a bar chart showing the average of Minutes of Delay per Flight broken down by Carrier Name, and filtered by State to only show Minnesota (MN). What was the average minutes of delay per flight for United in Minnesota?

- a. 2,582
- b. 61.74
- c. 62.98
- d. 53.69

# Solutions

1. Which of the following is the best reason to use an extract instead of a live connection?

The correct answer is c. You need to apply an aggregation that takes too long when using a live connection.

2. You created a group by selecting field labels in a view. How can you remove members from the group?

The correct answer is b. In the Data pane, right-click the group and select Edit Group.

3. Which of the following can you use to create a calculated field that returns data independent of the data granularity in a view?

The correct answer is d. A FIXED LOD calculation.

4. Interactive elements that you can add to a dashboard for users include \_\_\_\_\_. (Select all that apply.)

The correct answers are a. URL actions & c. filter actions.

5. A field that shows average home values for the United States in 2016 is most likely:

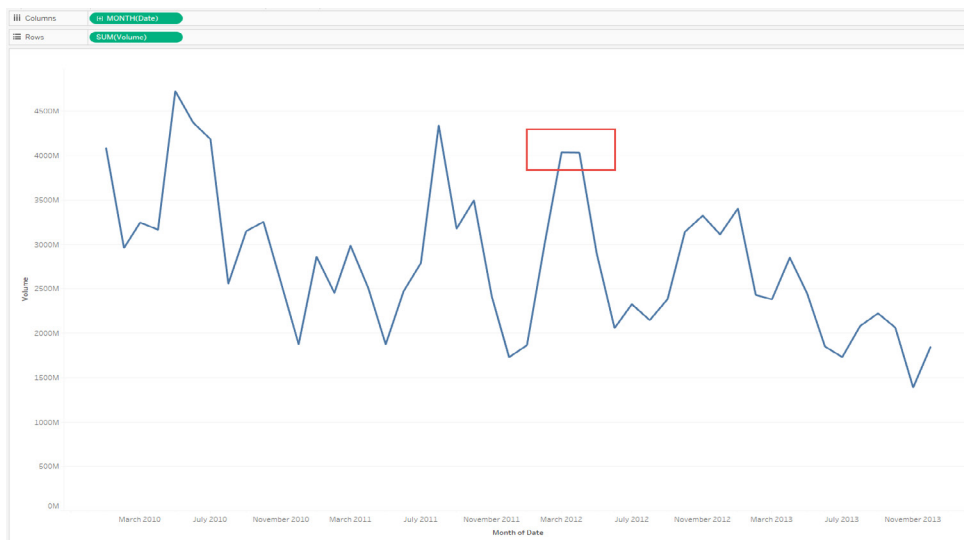
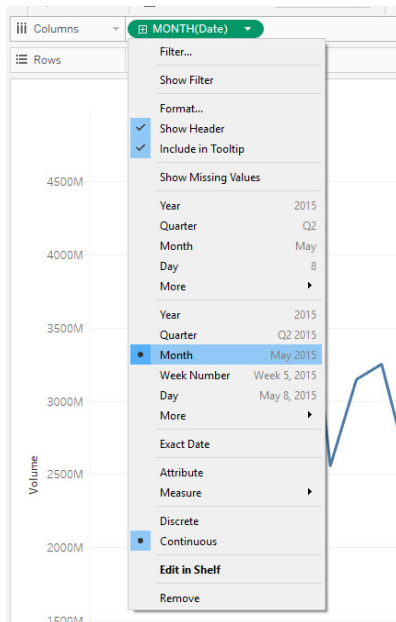
The correct answer is d. An aggregated measure.

Below there is guidance on a suggested method of finding each answer. You may find there are other ways determine the correct answer. The focus for this exam is the destination (i.e. accuracy), rather than the journey.

6. Using the **Stocks 2010–2013** table, create a chart to see the monthly change in volumes of stocks, beginning of 2010 to the end of 2013. Which two consecutive months saw the least fluctuation in increase or decrease?

The correct answer is b. March 2012 – April 2012.

The answer to this question can be found by placing the continuous month date value (May 2015) format on Columns, and placing SUM(Volume) on Rows.





7. Using the **Stocks 2010–2013** table, create a crosstab showing the sum of Volume per Company per Year, then add grand totals to the view. What was the total volume for Apple in 2013 and the total volume for Apple for 2010 through 2013, respectively?

The correct answer is a. 25,606,397,999 and 127,322,019,216.

The answer to this question can be found by placing YEAR(Date) on columns and Company on rows. Drag SUM(Volume) to labels.

The screenshot shows the Tableau interface with the following configuration:

- Columns:** YEAR(Date)
- Rows:** Company
- Marks:** SUM(Volume)

The resulting table is as follows:

Company	Date			
	2010	2011	2012	2013
Amazon	1,829,323,102	1,464,295,930	1,050,233,531	748,378,451
Apple	37,612,777,363	31,108,767,508	32,994,076,346	25,606,397,999
Biogen Idec	687,425,921	527,826,372	294,848,881	340,291,119

Use the Analysis menu to add a grand total for rows.

The screenshot shows the Tableau Analysis menu with the following options:

- Show Mark Labels
- Aggregate Measures
- Stack Marks
- View Data...
- Reveal Hidden Data
- Percentage Of
- Totals
  - Show Row Grand Totals
  - Show Column Grand Totals
  - Row Totals to Left
  - Column Totals to Top
  - Add All Subtotals
  - Remove All Subtotals
  - Total All Using
- Forecast
- Trend Lines
- Special Values
- Table Layout
- Legends
- Filters
- Highlighters
- Parameters
- Create Calculated Field...
- Edit Calculated Field
- Cycle Fields
- Swap Rows and Columns

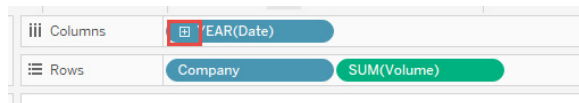
The resulting table with grand totals is as follows:

Company	Date				Grand Total
	2010	2011	2012	2013	
Amazon	1,829,323,102	1,464,295,930	1,050,233,531	748,378,451	5,092,231,014
Apple	37,612,777,363	31,108,767,508	32,994,076,346	25,606,397,999	127,322,019,216
Biogen Idec	687,425,921	527,826,372	294,848,881	340,291,119	1,850,392,293

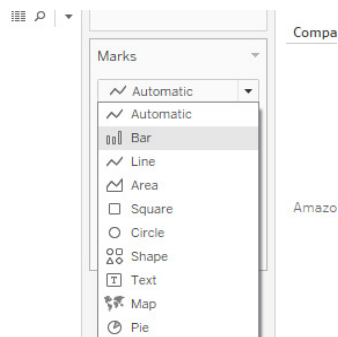
8. Using the **Stocks 2010-2013** table, create a chart that shows the percent difference in Volume for each company by year and quarter. How many quarters did Biogen Idec show a positive percent difference in volume?

The correct answer is d. 6.

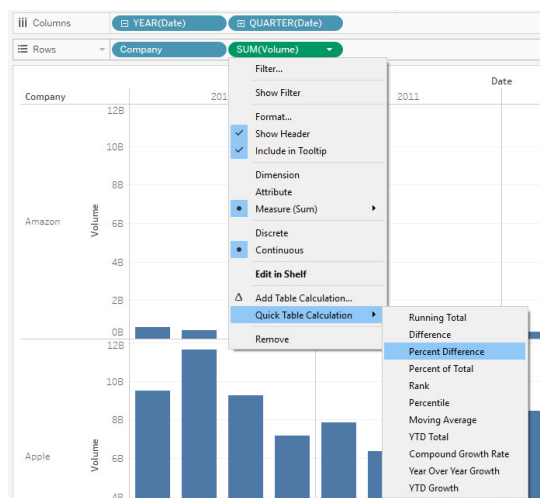
The answer to this question can be found by placing Company and Volume on Rows, and Date on Columns. On Columns, click the plus sign on YEAR(Date) to add QUARTER(Date) to the view.



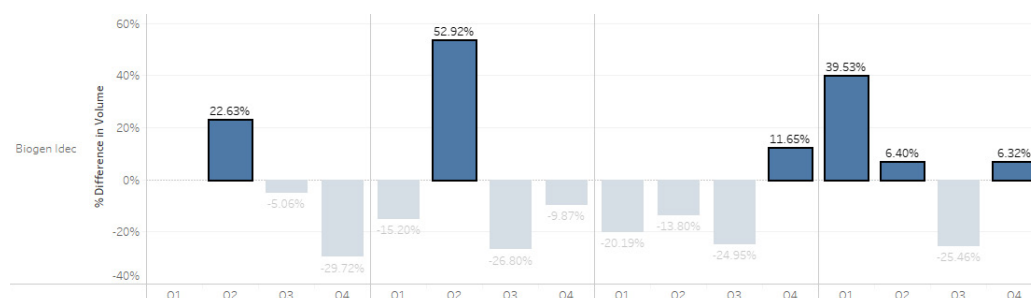
On the Marks card, change the chart type to Bar.



On Rows, right-click SUM(Volume), click Quick Table Calculation, and then select Percent Difference.



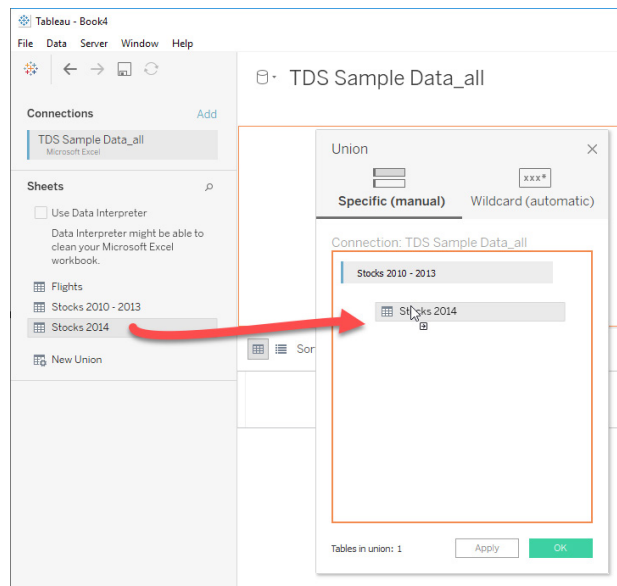
Click Label on the Marks card, and then click Show mark labels.



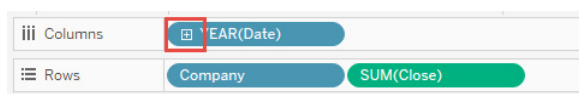
9. Union the **Stocks 2010-2013** and **Stocks 2014** tables, and then create a chart showing the average Close price by year and quarter for each Company from 2010 to 2014. How many quarters was Amazon's average closing price over \$300?

The correct answer is c. 5.

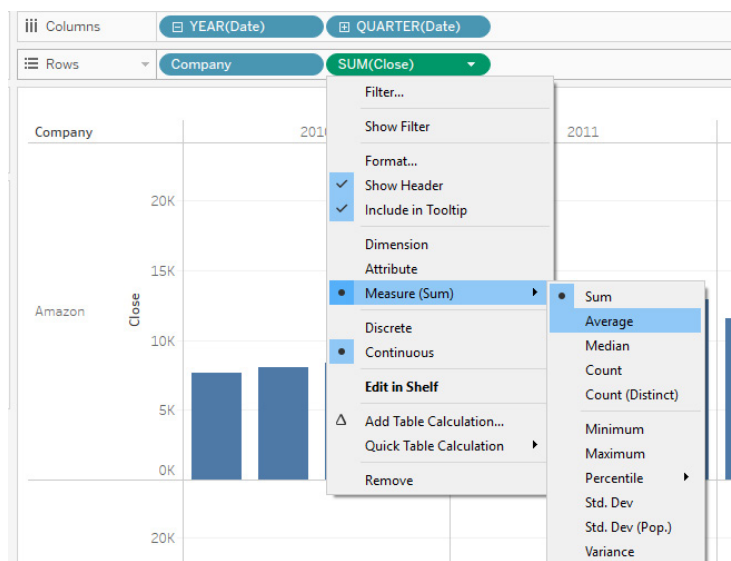
The answer to this question can be found by first creating a union. On the Data Source tab, double-click New Union. Drag **Stocks 2010-2013** into the dialog box. Then drag **Stocks 2014** into the dialog box, click OK, and then click Sheet 1.



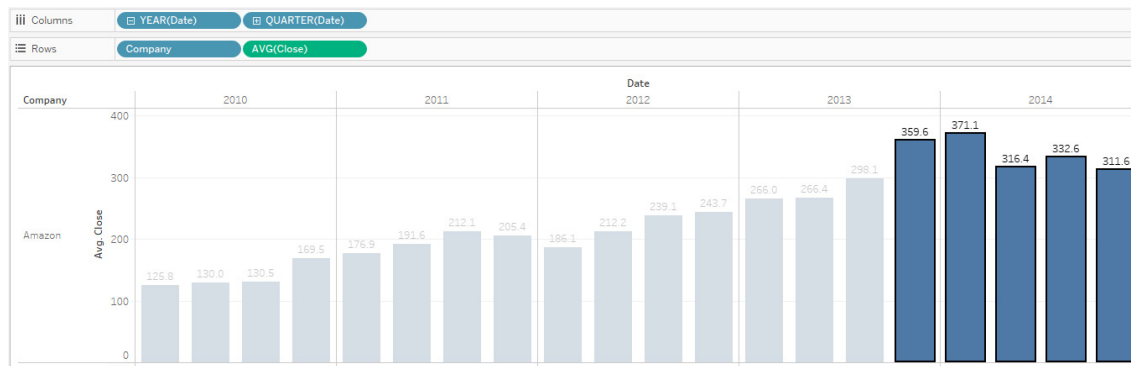
In the view, place **Company** and **Close** on Rows, and **Date** on Columns. On Columns, click the plus sign on **YEAR(Date)** to add **Quarter** to the view.



On the Marks card, change the chart type to Bar. On Rows, right-click **SUM(Close)**, click **Measure (Sum)**, and then select **Average**.



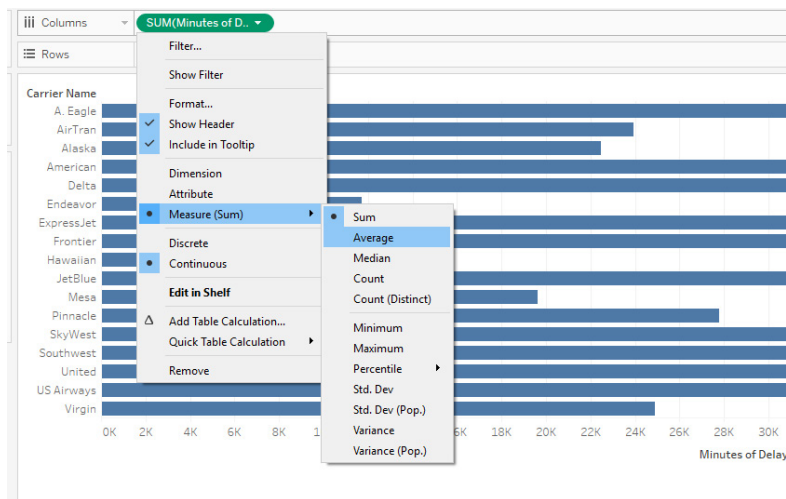
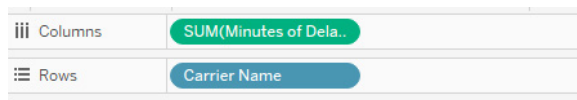
You can also add mark labels to the final view to easily identify the average close for each quarter.



10. Using the **Flights** table, create a bar chart showing the average of Minutes of Delay per Flight broken down by Carrier Name, and filtered by State to only show Minnesota (MN). What was the average minutes of delay per flight for United in Minnesota?

The correct answer is c. 62.98.

The answer to this question can be found by placing Carrier Name on Rows. Then place SUM(Minutes of Delay per Flight) on Columns and change the measure's aggregation to Average.



Drag State to Filters and then select 'MN' to filter to only show values for Minnesota.

