



# Tableau Certified Data Analyst

Exam Guide



## Awarded Credentials

Upon successful completion of this exam, candidates are awarded the title of Tableau Certified Data Analyst. This title is active for two years.

## Target Audience

A Tableau Data Analyst enables stakeholders to make business decisions by understanding the business problem, identifying data to explore for analysis, and delivering actionable insights.

The Data Analyst uses Tableau Desktop, Tableau Prep, and either Tableau Server or Tableau Online to:

- Connect to data sources
- Perform data transformations
- Explore and analyze data
- Create meaningful visualizations that answer key business questions

This exam measures the candidate's:

- Knowledge of the capabilities of Tableau Desktop, Tableau Prep, and either Tableau Server or Tableau Online
- Ability to share content and keep the content current by publishing, scheduling, and maintaining it on the web

## Exam Guide Disclosure

This document provides information on the structure of this exam, along with the knowledge and skills being measured. It suggests resources to help the candidate prepare for success. This document is not intended to build product knowledge nor to be used as a comprehensive list of exam content.

## Learning Resources

There are no required prerequisites for this exam. Individuals learn differently and everyday use and exposure to Tableau varies.

The best preparation is role experience and time with the product. To be prepared, candidates are strongly encouraged to have at least 6 months of experience.

## Exam Format

- **Time Limit:** 120 minutes (includes 3 minutes for reviewing the NDA and 5 minutes for tutorial).
- **Exam Check-in:** Check-in begins 30 minutes before the scheduled exam time.
- **Question Format:**
  - **Knowledge-based:** Multiple choice, Multiple selection, and Active screen (includes Build list, Drag and drop, and Hot area)
  - **Performanced-based:** Hands-on lab
- **Number of Questions:**
  - Scored items: 30 knowledge-based items and 1 hands-on lab with 10-11 tasks.
  - Unscored items: 15 knowledge-based items and 1-2 hands-on lab tasks.
- **Scoring:** Candidates will receive an email when their score report is available (within 48 hours of completing the exam.) To navigate to that score report, [log into your certification account](#). Once you are logged in, click on Schedule My Exam/Schedule or Manage my exam with Pearson then, GO TO PEARSON. In your Pearson VUE account dashboard, click on my Exam History or View Exam Results to download your score report.
- **Passing Score:** The passing scaled score for the Tableau Certified Data Analyst exam is 750.
- **Language(s) Offered:** English
- **Exam Delivery Provider:** [Pearson VUE](#)
- **Registration:** Go to [Pearson VUE](#) to register for the Tableau Certified Data Analyst exam.
- **Exam Delivery Method:** Testing center and online delivery are both available. Learn more about the check-in process and testing experience for each method [here](#).

## System Preparation for an Online-Proctored Exam

For a successful exam experience, ensure your computer, network, and the physical environment are properly configured. This includes performing a [system test](#) before the exam. Review the [Technical Requirements](#) for complete details. Larger monitors are recommended to result in the best testing experience for exams that include hands-on lab items. For questions, email [certification@tableau.com](mailto:certification@tableau.com) or visit [tableau.com/certification](https://tableau.com/certification).

## Scoring

### Scaled Scoring

Scaled scores are a mathematical conversion of the number of items that a candidate answers correctly so that there is a consistent scale used across all forms of the exam. A relevant example is the process of converting pounds to kilograms. The weight of the object has not changed, only the units being reported.

Tableau exam results are reported as a score from 100 to 1000. The score shows how the candidate performed on the examination as a whole and the pass or fail designation. Scaled scoring models are used to equate scores across multiple exam forms that may have slightly different difficulty levels.

Score reports are sent when a candidate fails the exam. This report contains a table of categories of performance at each section level. This information is designed to provide general feedback concerning examination performance. The examination uses a compensatory scoring model, which means candidates do not need to “pass” the individual sections, only the overall examination. Each section of the examination has a specific weighting, some sections have more questions than others. The scoring table contains general information, highlighting strengths and weaknesses. Section level feedback should be interpreted with candidate caution and paired with other available forms of remediation before retaking the exam.

### Unscored Content

This examination includes unscored items. These items are placed on the exam to gather statistical information to verify their validity for future use. These items are not identified on the exam and do not affect the scoring of the exam.

## Exam Structure

The Tableau Certified Data Analyst exam has 3 sections. The first section is knowledge-based with a variety of item types, but no hands-on questions. The second section of the exam is the hands-on lab. This section requires the candidate to demonstrate their skills using Tableau. The third section resembles the first section in testing the candidate's knowledge with a variety of item types, but no hands-on questions. Candidates are not allowed go back to a previous section of the exam once they have moved on to the next section. Each section of the exam has a specific weighting, some sections have more questions than others.

## Item Types Defined

**Multiple Choice:** Candidates can select only one answer option.

**Multiple Response:** Candidates can select two or more answer options.

**Active screen:** Active Screen items incorporate interactive user interface elements, such as drop-down lists, checkboxes, option buttons, and drag-and-drop functionality. Candidates select answers using these elements.

**Build list:** Build List items evaluate a candidate's ability to rank a list of items or order a series of tasks. Candidates are given a split screen with a list of options in the left column and an answer space in the right column. Using arrow buttons, candidates select options in the left column and sort them in the right column. Each option can only be used one time.

**Drag and drop:** Evaluate object association and placement skills with the Drag-and-Drop item type. Candidates select and reposition answer options within a list or graphic. In the example below, candidates drag source elements listed in the left column (Item List) into target positions in the right column (Category).

**Hot area:** Hot Area items evaluate a candidate's ability to locate correct regions on an image. Candidates are presented with an image. They submit an answer to the item by selecting specific locations on the image. These locations are activated by "hot area objects."

**Hands-on lab:** Candidates will work in a lab environment using Tableau to answer hands-on questions. Responses are automatically graded within the lab.

**Splitter bar:** In some special item type presentations – there is a "splitter bar" between the item and the answer area. Clicking on the splitter bar, changes the bar highlight to orange and allows candidates to drag the bar – making the viewing area larger when the candidate chooses.

## Additional Exam Details

### Access to Materials, Applications, or Internet

Exam items in the first and third sections are written at a recall or understand/apply level. These parts of the exam are administered without access to the Tableau Platform. The second, hands-on lab section of the exam requires the candidate to use the Tableau Platform to perform the required tasks. Candidates will have access to the .pdf version of Tableau Help during this section of the exam. Access to the internet, or any other outside application is prohibited during the entire exam.

### Comments

Candidates are encouraged to comment on items in the exam. Feedback from all comments is considered when item performance is reviewed prior to the release of new versions of exam content.

### Timeliness

Completing a task effectively and efficiently has become a standard that organizations expect from employees. This exam is timed as a critical competency of successful candidates.

### Technical Issues

If you encounter technical issues during the exam, please contact the proctor. In many cases, the only course of action the proctor can recommend or take, is to restart the exam. More than one restart may be needed. However, if you are not seeing a resolution in a timely manner and you feel your results will be negatively affected or you will not be able to finish the exam, ask the proctor to stop the exam and log a case with Pearson VUE. Once the exam has been stopped, please follow up with the Tableau Certification Team at [certification@tableau.com](mailto:certification@tableau.com) to log a case about your experience.

## Content Outline

As a reference, this exam guide includes test domains, coverage percentages and objectives only. The table below lists the main content domains and their weightings.

Domain Title	% of Exam Content
Domain 1: Connect to and Transform Data	24%
Domain 2: Explore and Analyze Data	41%
Domain 3: Create Content	26%
Domain 4: Publish and Manage Content on Tableau Server and Tableau Online	9%
<b>TOTAL</b>	<b>100%</b>

## Domain Objectives

PLEASE NOTE: This is not a comprehensive listing of the content on this examination.

### Domain 1: Connect to and Transform Data

- 1.1. Connect to data sources
  - 1.1.1. Choose an appropriate data source
  - 1.1.2. Choose between live connection or extract
  - 1.1.3. Connect to extracts
  - 1.1.4. Connect to spreadsheets
  - 1.1.5. Connect to .hyper files (or .tde files)
  - 1.1.6. Connect to relational databases
  - 1.1.7. Pull data from relational databases by using custom SQL queries
  - 1.1.8. Connect to a data source on Tableau Server
  - 1.1.9. Replace the connected data source with another data source for an existing chart or sheet
- 1.2. Prepare data for analysis
  - 1.2.1. Assess data quality (completeness, consistency, accuracy)
  - 1.2.2. Perform cleaning operations
  - 1.2.3. Organize data into folders

- 1.2.4. Use multiple data sources (establish relationships, create joins, union tables, blend data)
- 1.2.5. Prepare data by using Data Interpreter, pivot, and split
- 1.2.6. Create extract filters
- 1.3. Perform data transformation in Tableau Prep
  - 1.3.1. Choose which data transformation to perform based on a business scenario
  - 1.3.2. Combine data by using unions
  - 1.3.3. Combine data by using joins
  - 1.3.4. Shape data by using aggregations
  - 1.3.5. Perform filtering
  - 1.3.6. Shape data by using pivots
- 1.4. Customize fields
  - 1.4.1. Change default field properties (types, sorting, etc.)
  - 1.4.2. Rename columns
  - 1.4.3. Choose when to convert between discrete and continuous
  - 1.4.4. Choose when to convert between dimension and measure
  - 1.4.5. Create aliases

## Domain 2: Explore and Analyze Data

- 2.1. Create calculated fields
  - 2.1.1. Write date calculations (DATEPARSE, DATENAME...)
  - 2.1.2. Write string functions
  - 2.1.3. Write logical and Boolean expressions (If, case, nested, etc.)
  - 2.1.4. Write number functions
  - 2.1.5. Write type conversion functions
  - 2.1.6. Write aggregate functions
  - 2.1.7. Write FIXED LOD calculations
- 2.2. Create quick table calculations
  - 2.2.1. Moving average
  - 2.2.2. Percent of total
  - 2.2.3. Running total



- 2.2.4. Difference and percent of difference
- 2.2.5. Percentile
- 2.2.6. Compound growth rate
- 2.3. Create custom table calculations
  - 2.3.1. Year to date
  - 2.3.2. Month to date
  - 2.3.3. Year over year
  - 2.3.4. Index
  - 2.3.5. Ranking
  - 2.3.6. First-last
- 2.4. Create and use filters
  - 2.4.1. Apply filters to dimensions and measures
  - 2.4.2. Configure filter settings including Top N, Bottom N, include, exclude, wildcard, and conditional
  - 2.4.3. Add filters to context
  - 2.4.4. Apply filters to multiple sheets and data sources
- 2.5. Create parameters to enable interactivity
  - 2.5.1. In calculations
  - 2.5.2. With filters
  - 2.5.3. With reference lines
- 2.6. Structure the data
  - 2.6.1. Sets
  - 2.6.2. Bins
  - 2.6.3. Hierarchies
  - 2.6.4. Groups
- 2.7. Map data geographically
  - 2.7.1. Create symbol maps
  - 2.7.2. Create heat maps
  - 2.7.3. Create density maps
  - 2.7.4. Create choropleth maps (filled maps)

## 2.8. Summarize, model, and customize data by using the Analytics feature

- 2.8.1. Totals and subtotals
- 2.8.2. Reference lines
- 2.8.3. Reference bands
- 2.8.4. Average lines
- 2.8.5. Trend lines
- 2.8.6. Distribution bands
- 2.8.7. Forecast by using default settings
- 2.8.8. Customize a data forecasting model
- 2.8.9. Create a predictive model

## Domain 3: Create Content

### 3.1. Create charts

- 3.1.1. Create basic charts from scratch (bar, line, pie, highlight table, scatter plot, histogram, tree map, bubbles, data tables, Gantt, box plots, area, dual axis, combo)
- 3.1.2. Sort data (including custom sort)

### 3.2. Create dashboards and stories

- 3.2.1. Combine sheets into a dashboard by using containers and layout options
- 3.2.2. Add objects
- 3.2.3. Create stories

### 3.3. Add interactivity to dashboards

- 3.3.1. Apply a filter to a view
- 3.3.2. Add filter, URL, and highlight actions
- 3.3.3. Swap sheets by using parameters or sheet selector
- 3.3.4. Add navigation buttons
- 3.3.5. Implement user guiding sentences (click..., hover..., menu options)

### 3.4. Format dashboards

- 3.4.1. Apply color, font, shapes, styling
- 3.4.2. Add custom shapes and color palettes
- 3.4.3. Add annotations

- 3.4.4. Add tooltips
- 3.4.5. Apply padding
- 3.4.6. Remove gridlines, row-level and column-level bands, and shading
- 3.4.7. Apply responsive design for specific device layouts

## **Domain 4: Publish and Manage Content on Tableau Server and Tableau Online**

- 4.1. Publish Content
  - 4.1.1. Publish a workbook
  - 4.1.2. Publish a data source
  - 4.1.3. Print content
  - 4.1.4. Export content
- 4.2. Schedule data updates
  - 4.2.1. Schedule data extract refreshes
  - 4.2.2. Schedule a Tableau Prep workflow
- 4.3. Manage Published workbooks
  - 4.3.1. Create alerts
  - 4.3.2. Create subscriptions

## Practice Exam Questions

These questions are provided to give candidates an awareness of the type of questions, structure, and wording to expect on the exam and should not be used to assess knowledge or preparedness.

### Practice Question 1

You have a dataset that contains a list of gym equipment and the exercises that use them.

Equipment	Exercise
Barbell	Bench Press
Dumbbell	Bicep Curl
Jump Rope	Double-Under
Barbell	Front Squat
Dumbbell	Overhead Press
...	...

Which formula should you use to get the number of items in the equipment list?

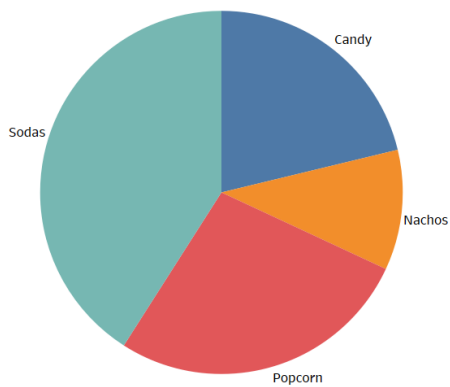
- a) MAX ( [Equipment] )
- b) COUNT ( [Equipment] )
- c) COUNTD ( [Equipment] )
- d) COVAR ( [Equipment] )
- e) ATTR ( [Equipment] )

## Practice Question 2

You have the following dataset:

Item	Revenue
Candy	18,782
Sodas	36,241
Popcorn	23,987
Nachos	9,483

You want to create the following pie chart.



How should you configure the marks for the pie chart?

- Drag Revenue to Color, Item to Label, and Item to Angle.
- Drag Item to Color, Item to Label, and Revenue to Angle.
- Drag Item to Size, Person to Label, and Revenue to Detail.
- Drag Revenue to Color, Revenue to Label, and Item to Detail.

# Solutions to Practice Exam Questions

## Practice Question 1 - Answer and Rationale

You have a dataset that contains a list of gym equipment and the exercises that use them.

Equipment	Exercise
Barbell	Bench Press
Dumbbell	Bicep Curl
Jump Rope	Double-Under
Barbell	Front Squat
Dumbbell	Overhead Press
...	...

Which formula should you use to get the number of items in the equipment list?

- a) `MAX ([Equipment])`  
*INCORRECT – When using MAX with a string, a string value, not a numeric value is returned.*
- b) `COUNT ([Equipment])`  
*INCORRECT – COUNT will count each time an equipment is listed, resulting in over-counting*
- c) `COUNTD ([Equipment])`  
*CORRECT – COUNTD counts the distinct number of equipment that appear in the list (which is 3).*
- d) `COVAR ([Equipment])`  
*INCORRECT – COVAR does not apply because it is a measure of how much two variables change together*
- e) `ATTR ([Equipment])`  
*INCORRECT – ATTR does not apply because it is a test for heterogeneity across the rows in a result set*

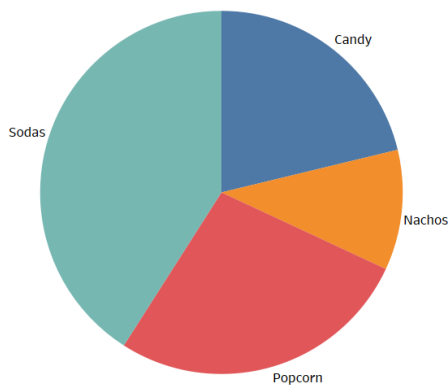
Learn more - [https://help.tableau.com/current/pro/desktop/en-us/calculations\\_calculatedfields\\_aggregate\\_create.htm](https://help.tableau.com/current/pro/desktop/en-us/calculations_calculatedfields_aggregate_create.htm)

## Practice Question 2 - Answer and Rationale

You have the following dataset:

Item	Revenue
Candy	18,782
Sodas	36,241
Popcorn	23,987
Nachos	9,483

You want to create the following pie chart.



How should you configure the marks for the pie chart?

- a) Drag Revenue to Color, Item to Label, and Item to Angle.

*INCORRECT – The field Item is invalid on Size for Pie Marks, which require continuous numeric fields.*

- b) Drag Item to Color, Item to Label, and Revenue to Angle.

*CORRECT – Using a Measure on the Angle and a Dimension on the Color and Label produce the example chart*

- c) Drag Item to Size, Item to Label, and Revenue to Detail.

*INCORRECT – The field Item is invalid on Size for Pie Marks, which require continuous numeric fields.*

- d) Drag Revenue to Color, Revenue to Label, and Item to Detail.

*INCORRECT – This creates a pie chart split evenly displaying Revenue as the label.*

Learn more - [https://help.tableau.com/current/pro/desktop/en-us/buildexamples\\_pie.htm](https://help.tableau.com/current/pro/desktop/en-us/buildexamples_pie.htm)

## Notes and Revisions

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Draft v 1.0	Initial draft created for TDA-C01 Exam	
v 1.1	Released for TDA-C01 Exam	1/6/2022

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