Conquering the PL-300 Power BI Data Analyst Certification

Presented By: Angelica Domenech





MAKE LEARNING RELATABLE!



FREE TRIAL!



Pragmatic Works free community plan gives you lifetime access to 20+ courses on topics, such as Power Bl, Excel, Power Apps, Azure, Power Automate, T-SQL, and more

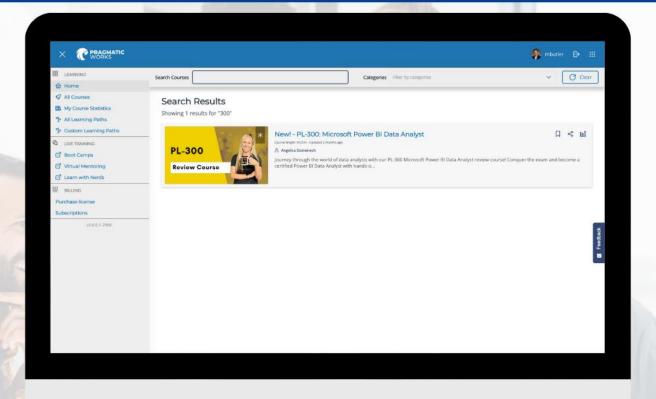
- Get preview access to all 120+ COURSES and CUSTOM LEARNING PATHS for 7 days
- LABS AND FILES included
- Access courses from ANY BROWSER
- Access QUIZZES TO PRACTICE while you learn

MAKE LEARNING RELATABLE!



FREE TRIAL!





9+ HOURS OF PREP CONTENT!

POWER PLATFORM

CO-PILOT



OCTOBER 12 - 11:00 AM ET





About Angelica



Trainer at Pragmatic Works, Specialize in Power Bl

Former educator – 9 years teaching High School Science

LinkedIn: Angelica-Domenech adomenech@pragmaticworks.com







Agenda

Exam Overview Study Tips Functional Group Demos

Prepare the Data

Model the Data

Visualize the Data

Deploy and Maintain Assets

Final Advice



Exam Overview

What can I expect from this exam?

Questions 40-60

- Multiple choice, Multi-Select, Drag and Drop, Build List Reorder, Case Studies

Seat Duration: 120 minutes, Exam Time: 100 minutes

What score do I need to pass the exam?

Passing score = 700



Exam Overview

Exam Policies and Requirements

Online with OnVUE

Check-in up to 30 minutes prior

Follow the prompts to complete system check

Provide pictures of testing room

No one may enter the room

In-person at a testing facility

Arrive 15 minutes early

No personal items allowed

May use an erasable noteboard



What's new with Microsoft Exams?

Is the PL-300 Exam open book?

You can now access Microsoft Learn during your exam!

You will not be able to access the Q&A section or your profile.

You WILL NOT get additional time to browse Microsoft Learn.

DO NOT rely on Microsoft Learn to help you answer every question.



Study Tips

Create A Study Plan

Take a Review Course

Complete the Microsoft Learning Path

Take a Practice Test



Prepare the Data (25–30%)

Get data from data sources

- •Identify and connect to a data source
- •Change data source settings, including credentials, privacy levels, and data source locations
- •Select a shared dataset, or create a local dataset
- •Choose between DirectQuery, Import, and Dual mode
- •Change the value in a parameter

Clean the data

- •Evaluate data, including data statistics and column properties
- •Resolve inconsistencies, unexpected or null values, and data quality issues
- •Resolve data import errors

Transform and load the data

- •Select appropriate column data types
- Create and transform columns
- Transform a query
- •Design a star schema that contains facts and dimensions
- •Identify when to use reference or duplicate queries and the resulting impact
- Merge and append queries
- •Identify and create appropriate keys for relationships
- Configure data loading for queries



You need to make changes to your data sources. Which three changes are supported by the Data Source Settings in the Power Query interface? Each correct answer presents a complete solution.

- a) Adding a column
- b) Renaming a column
- c) Clearing permissions
- d) Editing permissions
- e) Modifying the file path



You import an Excel file into the Power BI Desktop and begin to analyze the data in the Power Query Editor. You need to identify outliers in a text column within the data source. Which information should you use from the Power Query Editor?

- a) The min and max values in Column profile
- b) The top and bottom values in Value distribution
- c) The value of the Distinct entry in Column statistics
- d) The value of the Unique entry in Column statistics



Demo Time

Tab 1 – Prepare the Data





You need to make changes to your data sources. Which three changes are supported by the Data Source Settings in the Power Query interface? Each correct answer presents a complete solution.

- a) Adding a column
- b) Renaming a column
- c) Clearing permissions
- d) Editing permissions
- e) Modifying the file path



You import an Excel file into the Power BI Desktop and begin to analyze the data in the Power Query Editor. You need to identify outliers in a text column within the data source. Which information should you use from the Power Query Editor?

- a) The min and max values in Column profile
- b) The top and bottom values in Value distribution
- c) The value of the Distinct entry in Column statistics
- d) The value of the Unique entry in Column statistics



Model the Data (25–30%)

Design and implement a data model

- Configure table and column properties
- •Implement role-playing dimensions
- •Define a relationship's cardinality and cross-filter direction
- •Create a common date table
- •Implement row-level security roles

Create model calculations by using DAX

- •Create single aggregation measures
- •Use CALCULATE to manipulate filters
- •Implement time intelligence measures
- •Identify implicit measures and replace with explicit measures
- Use basic statistical functions
- Create semi-additive measures

- •Create a measure by using quick measures
- Create calculated tables

Optimize model performance

- •Improve performance by identifying and removing unnecessary rows and columns
- •Identify poorly performing measures, relationships, and visuals by using Performance Analyzer
- •Improve performance by choosing optimal data types
- •Improve performance by summarizing data



You have a Power BI Desktop dataset that includes a table named Salesperson. The table includes a column named UPN. UPN contains the user principal name of the salesperson's Azure AD account. You need to ensure that each salesperson will only be able to see the rows in the Salesperson table where the UPN column value matches their User Principal Name. Which two actions should you perform? Each correct answer presents part of the solution

- a) Add a calculated column to the Salesperson table
- b) Add a conditional column to the Salesperson table
- c) Add a DAX expression filter to the Salesperson table
- d) Create a security role
- e) Create a what-if parameter



You have implemented role-based security that restricts access to a Power BI Desktop dataset for users who are assigned the role named Salespeople. You need to validate that the implementation works. What should you do?

- A. In Power Query Editor, add a conditional column to the Salesperson table.
- B. In the Report view, activate the View as feature.
- C. In the Report view, add a DAX expression filter to the Salesperson table.
- D. In the Report view, create a what-if parameter.



You are creating a report in a Power BI Desktop by using a dataset that contains sales data.

You need to create a measure that always provides the value of total sales for the year 2022, regardless of which year is selected in any visual in the same report.

Which DAX function should you use in combination with the <u>SUM</u> function to override the context and provide the result?

- A. CALCULATE
- B. FILTER
- C. IGNORE
- D. SUMX



Demo Time

Tab 2 – Model the Data





You have a Power BI Desktop dataset that includes a table named Salesperson. The table includes a column named UPN. UPN contains the user principal name of the salesperson's Azure AD account. You need to ensure that each salesperson will only be able to see the rows in the Salesperson table where the UPN column value matches their User Principal Name. Which two actions should you perform? Each correct answer presents part of the solution

- a) Add a calculated column to the Salesperson table
- b) Add a conditional column to the Salesperson table
- c) Add a DAX expression filter to the Salesperson table
- d) Create a security role
- e) Create a what-if parameter



You have implemented role-based security that restricts access to a Power BI Desktop dataset for users who are assigned the role named Salespeople. You need to validate that the implementation works. What should you do?

- A. In Power Query Editor, add a conditional column to the Salesperson table.
- B. In the Report view, activate the View as feature.
- C. In the Report view, add a DAX expression filter to the Salesperson table.
- D. In the Report view, create a what-if parameter.



You are creating a report in a Power BI Desktop by using a dataset that contains sales data.

You need to create a measure that always provides the value of total sales for the year 2022, regardless of which year is selected in any visual in the same report.

Which DAX function should you use in combination with the <u>SUM</u> function to override the context and provide the result?

- A. CALCULATE
- B. FILTER
- C. IGNORE
- D. SUMX



Visualize & Analyze the Data (25–30%)

Create reports

- •Identify and implement appropriate visualizations
- Format and configure visualizations
- •Use a custom visual
- Apply and customize a theme
- Configure conditional formatting
- Apply slicing and filtering
- •Configure the report page
- •Use the Analyze in Excel feature
- •Choose when to use a paginated report

Enhance reports for usability and storytelling

- •Configure bookmarks
- Create custom tooltips
- •Edit and configure interactions between visuals
- •Configure navigation for a report
- Apply sorting
- •Configure sync slicers
- •Group and layer visuals by using the Selection pane
- •Drill down into data using interactive visuals
- •Configure export of report content, and perform an export
- Share reports and visuals in PowerPoint*
- Design reports for mobile devices
- •Incorporate the Q&A feature in a report

*Skill added August 22nd, 2023



You are editing a report in the Power BI Desktop. You need to adjust the behavior of the report by editing interactions. Which two types of interaction behavior can you change between visuals? Each correct answer presents a complete solution.

- A. Drillthrough
- **B.** Expand
- C. Filter
- D. Highlight



You are modifying a report in the Power BI Desktop. The report contains a single report page that has three card visuals and one clustered bar chart. You need to create a bookmark that displays only the clustered bar chart and hides the cards. The solution must minimize development effort. What should you do first?

- A. Add a bookmark in the Bookmarks Pane
- B. Hide the three cards in the Selection Pane
- C. Publish the report to the Power BI Service
- D. Select the spotlight option on the clustered bar chart



Demo Time

Tab 3 – Visualize and Analyze the Data





You are editing a report in the Power BI Desktop. You need to adjust the behavior of the report by editing interactions. Which two types of interaction behavior can you change between visuals? Each correct answer presents a complete solution.

- A. Drillthrough
- **B.** Expand
- C. Filter
- D. Highlight



You are modifying a report in the Power BI Desktop. The report contains a single report page that has three card visuals and one clustered bar chart. You need to create a bookmark that displays only the clustered bar chart and hides the cards. The solution must minimize development effort. What should you do first?

- A. Add a bookmark in the Bookmarks Pane
- B. Hide the three cards in the Selection Pane
- C. Publish the report to the Power BI Service
- D. Select the spotlight option on the clustered bar chart



Deploy and Maintain Assets (15–20%)

Create and manage workspaces and assets

- •Create and configure a workspace
- Assign workspace roles
- •Configure and update a workspace app
- •Publish, import, or update assets in a workspace
- Create dashboards
- Choose a distribution method
- Apply sensitivity labels to workspace content
- •Configure subscriptions and data alerts
- Promote or certify Power BI content
- Manage global options for files

Manage datasets

- •Identify when a gateway is required
- •Configure a dataset scheduled refresh
- •Configure row-level security group membership
- Provide access to datasets



You upload reports to the Power BI Service and pin several visuals to a dashboard. You plan to create alert rules for several visuals. What are two locations you can view alerts? Each correct answer presents a complete solution.

- A. A report
- **B.** The notification center
- **C.** Microsoft Teams
- D. An email



You have a Power BI dataset. You need to set the dataset as discoverable. Which two configurations will allow the dataset to be marked as discoverable? Each correct answer presents a complete solution.

- A. Certify the dataset
- **B.** Enable RLS on the dataset
- C. Promote the dataset
- D. Publish dataset to a Premium workspace



Demo Time

Tab 4 – Deploy & Maintain Assets





You upload reports to the Power BI Service and pin several visuals to a dashboard. You plan to create alert rules for several visuals. What are two locations you can view alerts? Each correct answer presents a complete solution.

- A. A report
- **B.** The notification center
- C. Microsoft Teams
- D. An email



You have a Power BI dataset. You need to set the dataset as discoverable. Which two configurations will allow the dataset to be marked as discoverable? Each correct answer presents a complete solution.

- A. Certify the dataset
- B. Enable RLS on the dataset
- C. Promote the dataset
- D. Publish dataset to a Premium workspace



Test-Taking Tips for Success

Be well-rested!





Answer the questions you know first



