Exam PL-300: Microsoft Power BI Data Analyst – Skills Measured

NOTE: Passing score: 700. [Learn more about exam scores.](#)

Audience Profile

The Power BI data analyst delivers actionable insights by leveraging available data and applying domain expertise. The Power BI data analyst collaborates with key stakeholders across verticals to identify business requirements, cleans and transforms the data, and then designs and builds data models by using Power BI. The Power BI data analyst provides meaningful business value through easy-to-comprehend data visualizations, enables others to perform self-service analytics, and deploys and configures solutions for consumption. Candidates for this exam should be proficient using Power Query and writing expressions by using DAX.

Skills Measured

NOTE: The bullets that appear below each of the skills measured are intended to illustrate how we are assessing that skill. This list is NOT definitive or exhaustive.

NOTE: Most questions cover features that are General Availability (GA). The exam may contain questions on Preview features if those features are commonly used.

Prepare the Data (15-20%)

Get data from different data sources

- identify and connect to a data source
- change data source settings
- select a shared dataset or create a local dataset
- select a storage mode
- use Microsoft Dataverse
- change the value in a parameter
- connect to a data flow

Clean, transform, and load the data

- profile the data
- resolve inconsistencies, unexpected or null values, and data quality issues
- identify and create appropriate keys for joins
- evaluate and transform column data types
- shape and transform tables
- combine queries

- apply user-friendly naming conventions to columns and queries
- configure data loading
- resolve data import errors

Model the Data (30—35%)

Design a data model

- define the tables
- configure table and column properties
- design and implement role-playing dimensions
- define a relationship's cardinality and cross-filter direction
- design a data model that uses a star schema
- create a common date table

Develop a data model

- create calculated tables
- create hierarchies
- create calculated columns
- implement row-level security roles
- use the Q&A feature

Create model calculations by using DAX

- create basic measures by using DAX
- use CALCULATE to manipulate filters
- implement Time Intelligence using DAX
- replace implicit measures with explicit measures
- use basic statistical functions
- create semi-additive measures
- use quick measures

Optimize model performance

- remove unnecessary rows and columns
- identify poorly performing measures, relationships, and visuals
- reduce cardinality levels to improve performance

Visualize and Analyze the Data (25—30%)

Create reports

- add visualization items to reports

- choose an appropriate visualization type
- 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

Create dashboards

- manage tiles on a dashboard
- configure mobile view
- use the Q&A feature
- add a Quick Insights result to a dashboard
- apply a dashboard theme
- pin a live report page to a dashboard

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
- drilldown into data using interactive visuals
- export report data
- design reports for mobile devices

Identify patterns and trends

- use the Analyze feature in Power BI
- identify outliers
- choose between continuous and categorical axes
- use groupings, binnings, and clustering
- use AI visuals
- use the Forecast feature
- create reference lines by using the Analytics pane

Deploy and Maintain Assets (20—25%)

Manage files and datasets

- identify when a gateway is required
- configure a dataset scheduled refresh
- configure row-level security group membership
- provide access to datasets
- manage global options for files

Manage workspaces

- create and configure a workspace
- assign workspace roles
- configure and update a workspace app
- publish, import, or update assets in a workspace
- apply sensitivity labels to workspace content
- configure subscriptions and data alerts
- promote or certify Power BI content