Topic

Chuẩn bị dữ liệu (Prepare the data): Question 1 - 70

Mô hình hóa dữ liệu (Model the data): Question 71 - 149

Trực quan hóa dữ liệu (Visualize and analyze the data): Question 150 - 180

QUESTION 1

Which query language do you use to extract data from Microsoft SQL Server?

A. DAX
B. T-SQL
C. MDX

Answer: B

Reference:

QUESTION 2

You're creating a Power BI report with data from an Azure Analysis Services Cube. When the data refreshes in the cube, you would like to see it immediately in the Power BI report.

How should you connect?

A. Connect Live
B. Import
C. Direct Query

Answer: A

Reference: https://learn.microsoft.com/en-us/azure/analysis-services/analysis-services-connect-pbi

QUESTION 3

What can you do to improve performance when you are getting data in Power BI?

A. Only pull data into the Power BI service, not Power BI Desktop

B. Use the Select SQL statement in your SQL queries when you are pulling data from a relational database
C. Combine date and time columns into a single column
D. Do some calculations in the original data source

Answer: D

Reference:

QUESTION 4

Which storage mode leaves the data at the data source?

A. Import
B. Direct Query
C. Dual

Answer: B

Reference:

QUESTION 5

Which technology improves performance by generating a single query statement to retrieve and transform source data?

A. Query folding
B. Adding index columns
C. Adding custom columns with complex logic

Answer: A

Reference: https://learn.microsoft.com/en-us/power-query/query-folding-basics

QUESTION 6

What type of import error might leave a column blank?

A. Keep errors
B. Unpivot columns
C. Data type error

Answer: C

Reference:

QUESTION 7

You have the following three versions of an Azure SQL database:

- Test

- Production

- Development

You have a dataset that uses the development database as a data source.

You need to configure the dataset so that you can easily change the data source between the development, test, and production database servers from powerbi.com.

Which should you do?

A. Create a JSON file that contains the database server names. Import the JSON file to the dataset
B. Create a parameter and update the queries to use the parameter.
C. Create a query for each database server and hide the development tables.
D. Set the data source privacy level to Organizational and use the ReplaceValue Power Query M function.

Answer: B

Reference:https://learn.microsoft.com/en-us/fabric/cicd/best-practices-cicd#use-parameters-for-configurations-that-will-change-between-stages

https://www.phdata.io/blog/how-to-parameterize-data-sources-power-bi/

QUESTION 8

You have an Azure SQL database that contains sales transactions. The database is updated frequently.

You need to generate reports from the data to detect fraudulent transactions. The data must be visible within five minutes of an update.

How should you configure the data connection?

A. Add a SQL statement.
B. Set Data Connectivity mode to DirectQuery.
C. Set the Command timeout in minutes setting.
D. Set Data Connectivity mode to Import.

Answer: B

Reference: https://docs.microsoft.com/en-us/power-bi/connect-data/desktop-use-directquery

QUESTION 9

Which of the following sources lets users connect to a set of pre-wired connections?

A. PBIDS Files
B. JSON Files
C. Dataflows
D. SSAS Tabular

Answer: A

Reference: https://learn.microsoft.com/en-us/power-bi/connect-data/desktop-data-sources

QUESTION 10

You plan to publish your SSAS Tabular (live connection) data model to Power BI Service. What must be used in order for this to be possible?

A. Data Gateway
B. Dual Storage Mode
C. Parameters

D. Admin Privileges

Answer: A

Reference: https://learn.microsoft.com/en-us/power-bi/connect-data/desktop-analysis-services-tabular-data

Question: What's the difference between connecting live to a tabular model from the Power BI service versus connecting live from Power BI Desktop?

Answer: When you connect live to a tabular model from your workspace in the Power BI service to an Analysis Services database on-premises in your organization, an on-premises data gateway is required to secure communications between them. When you connect live to a tabular model from Power BI Desktop, a gateway isn't required because the Power BI Desktop and the Analysis Services server you're connecting to are both running on-premises in your organization. **However, if you publish your Power BI Desktop file to your Power BI workspace, a gateway is required.**

QUESTION 11

Which of the following sources can Power BI connect to?

A. SQL Database
B. Google Analytics
C. R scripts
D. All of the above

Answer: D

Reference:

QUESTION 12

What is the Query Editor used for?

A. As a cloud-based storage option for your organization's data

B. To shape & transform data, then load it into Power BI
C. To create relationships between data and lookup tables
D. To create measures & calculated columns using DAX

Answer: B

Reference:

QUESTION 13

In which storage mode are tables solely stored in-memory and queries fulfilled by cached data?

A. Import
B. DirectQuery
C. Dual
D. Native

Answer: A

Reference:

QUESTION 14

When should you use DirectQuery?

A. The source data never changes
B. Company policy states no data source restrictions
C. Dataset is too large to be stored in-memory
D. All of the above

Answer: C

Reference:

QUESTION 15

When would you need to access the Data Source Settings?

A. If you need to connect to a new data source
B. If you need to edit an existing query
C. If the file name or location changes
D. All of the above

Answer: C

Reference:

QUESTION 16

How can you use parameters when connecting to data?

A. To connect to a JSON file
B. To change data source values dynamically
C. To create "What-If" scenarios
D. To shape and transform data in the Query Editor

Answer: B

Reference:

QUESTION 17

Which of the following sources lets you connect your data to other business applications?

A. Microsoft Dataverse
B. Microsoft Dataplatform
C. Microsoft Dataflows
D. Microsoft Excel

Answer: A

Reference: https://learn.microsoft.com/en-us/power-apps/maker/data-platform/data-platform-intro

QUESTION 18

You have a Microsoft Excel spreadsheet that contains a table named Sales.

You need to add the Sales table to a Power BI dashboard as a tile.

How should you configure the tile?

A. From the Power BI service, import the data from the Excel workbook.
B. From Excel, publish the workbook to the Power BI service.
C. From the Power BI tab in Excel, pin the table.
D. From the Power BI service, upload the Excel workbook.

Answer: C

Reference: https://learn.microsoft.com/en-us/power-bi/create-reports/service-dashboard-pin-tile-from-excel

QUESTION 19

You have two Microsoft SQL Server database servers named SQLProd and SQLDev. SQLDev contains the same tables as SQLProd, but only a subset of the data in SQLProd.

You create a new Power BI Desktop model that uses 120 tables from SQLDev.

You plan to publish the Power BI file to the Power BI service.

You need to connect the model to the tables in SQLProd. The solution must minimize administrative effort.

What should you do from Query Editor before you publish the model?

A. Create a new connection to SQLProd, and then import the tables from SQLProd.
B. Delete the existing queries, and then add new data sources.
C. Configure the Data source settings.
D. Edit the source of each table query.

Answer: C

Reference:

QUESTION 20

You plan to create several datasets by using the Power BI service.

You have the files configured as shown in the following table.

File name	File type	Size	Location
Data 1	TSV	50 MB	Microsoft OneDrive
Data 2	XLSX	3 GB	Local
Data 3	XML	100 MB	Microsoft OneDrive for Business
Data 4	CSV	2 GB	Microsoft OneDrive
Data 5	JPG	5 MB	Local

You need to identify which files can be used as datasets.

Which two files should you identify?

A. Data 1
B. Data 2
C. Data 3
D. Data 4
E. Data 5

Answer: B, D

Reference:

a) TSV is not supported via Power BI Service, and in question it clearly says "by using Power BI Service".

b) XLSX 3 gb will not work for Pro licence, but it will work for Premium licence. In question there is no mention about licence type so this option will work for some customers, for some not. Partially correct.

c) XML is not supported via Power BI Service, and in question it clearly says "by using Power BI Service".

d) CSV, same as xlsx 3gb, it will work for Premium licence. Partially correct.

e) JPG is not suported via Power BI Service.

QUESTION 21

Your company has several developers who plan to create custom solutions that will interact with the API for the Power BI service.

Which three operations can the developers achieve by using the API?

A. Retrieve rows from a dataset
B. Create a dataset
C. Add rows to a dataset
D. Refresh an imported dataset
E. Add a member to a row-level security role

Answer: A, B, C

Reference: https://powerbi.microsoft.com/en-us/blog/announcing-data-refresh-apis-in-the-power-bi-service/

QUESTION 22

You have a service published to a website.

When you connect to the website, you receive the following data.

```
<service xmlns="http://www.w3.org/2007/app"
 xmlns:atom="http://www.w3.org/2005/Atom"
 xml:base="http://data.nortwindtraders.com/Northwind/Northwind.svc/">
  <workspace>
   <atom:title>Default</atom:title>
   <collection href="Categories">
    <atom:title>Categories</atom:title>
   </collection>
   <collection href="Customers">
    <atom: title>Customers</atom:title>
   </collection>
   <collection href="Order_Details">
    <atom:title>Order_Details</atom:title>
   </collection>
  </workspace>
</service>
```

You need to create a query that retrieves the Categories data and the Customers data.

Which type of source should you use?

A. JSON
B. Text/CSV
C. OData Feed
D. XML

Answer: C

Reference:

QUESTION 23

In Power BI Desktop, you are updating an existing report that connects to a Microsoft SQL Server database.

You use database (SQL authentication) credentials to connect to the source.

The last credentials that were entered are expired.

You need to update the credentials.

Which two actions should you perform?

A. Open the Data Source Settings dialog box and locate the data source.
B. Select Edit Permissions and enter new credentials.
C. Open the Get Data dialog box and make a new connection to the database.
D. Open the Options dialog box and allow data previews to download in the background.

Answer: A, B

Reference:

QUESTION 24

You plan to populate a table in a Power BI dataset with data from a Microsoft SharePoint Online list.

Which storage mode will be used?

A. DirectQuery
B. live connection
C. Composite

D. Imported

Answer: D

Reference:

QUESTION 25

Which data role enables advanced analytics capabilities through reports and visualizations?

A. Data analyst
B. Data scientist
C. Data engineer

Answer: A

Reference:

QUESTION 26

Which data analyst task has critical performance impact on reporting and data analysis?

A. Analyze
B. Visualize
C. Model

Answer: C

Reference:

QUESTION 27

What is a key benefit of data analysis?

A. Decisive analytics
B. Informed business decisions
C. Complex reports

Answer: B

Reference:

QUESTION 28

What are the building blocks of Power BI?

A. Tiles, dashboards, databases, mobile devices
B. Visual Studio, C#, and JSON files
C. Datasets, Visualizations, Reports, Dashboards, and Tiles

Answer: C

Reference:

QUESTION 29

What is the common flow of activity in Power BI?

A. Bring data into Power BI Desktop and create a report, share it to the Power BI service, view and interact with reports and dashboards
B. Bring data into Power BI mobile, create a report, then share it to Power BI Desktop.
C. Create a report in the Power BI service, share it to Power BI mobile, interact with it in Power BI Desktop.
D. Create a report in Power BI mobile, share it to the Power BI Desktop, view and interact in the Power BI service.

Answer: A

Reference:

QUESTION 30

A collection of ready-made visuals, pre-arranged in dashboards and reports is called what?

A. The canvas

B. An app
C. A dataset
D. Scheduled refresh

Answer: B

Reference:

QUESTION 31

Which of the following sources contains sites, document libraries, and folders?

A. SharePoint Online
B. Microsoft Dataverse
C. Power BI Libraries
D. Filing Cabinets

Answer: A

Reference:

QUESTION 32

The primary data preparation tool in Power BI is called what?

A. Report editor
B. Power Query editor
C. Data editor

Answer: B

Reference:

QUESTION 33

The process of shaping data by converting your flat data into a table that contains an aggregation value for each unique value in a column is called what?

A. Group by columns
B. Pivot (pivoting a column)
C. Manage aggregations

Answer: B

Reference:

QUESTION 34

What can be achieved by removing unnecessary rows and columns?

A. It is not necessary to delete unnecessary rows and columns and it is a good practice to keep all metadata intact.
B. Deleting unnecessary rows and columns can damage the structure of the data model.
C. Deleting unnecessary rows and columns will reduce the dataset size and it is a good practice to load only necessary data into your data model.

Answer: C

Reference:

QUESTION 35

How many rows does Power Query scan to detect the type of data in the columns?

A. 10,000
B. 1,000
C. 100

Answer: B

Reference:

QUESTION 36

Data profiling is defined as what?

A. Aggregating columns containing numeric data
B. Studying the nuances of the data
C. Data modeling

Answer: B

Reference:

QUESTION 37

What is the risk of having null values in a numeric column?

A. DAX expressions that MAX data will be incorrect
B. DAX expressions that SUM data will be incorrect
C. DAX expressions that AVERAGE data will be incorrect

Answer: C

Reference:

QUESTION 38

What is not a best practice for naming conventions in Power BI?

A. Rename columns to have spaces in them
B. Replace values that have integers with human readable results
C. Abbreviated column names

Answer: C

Reference:

QUESTION 39

What functionality lets you see the code that is generated as part of each transformation step?

A. Advanced editor
B. Data profiling

C. Queries pane

Answer: A

Reference:

QUESTION 40

If you have two queries that contain different data with the same structure, and you want to combine them into one query, which operation should you perform?

A. Merge
B. Append
C. Combine column

Answer: B

Reference:

QUESTION 41

You have a prospective customer list that contains 1,500 rows of data. The list contains the following fields:

- First name

- Last name

- Email address

- State/Region

- Phone number

You import the list into Power Query Editor.

You need to ensure that the list contains records for each State/Region to which you want to target a marketing campaign.

Which two actions should you perform?

A. Open the Advanced Editor.
B. Select Column quality.
C. Enable Column profiling based on entire dataset.
D. Select Column distribution.
E. Select Column profile.

Answer: C. E

Reference:

QUESTION 42

You have a CSV file that contains user complaints. The file contains a column named Logged. Logged contains the date and time each complaint occurred. The data in Logged is in the following format: 2018-12-31 at 08:59.

You need to be able to analyze the complaints by the logged date and use a built-in date hierarchy.

What should you do?

A. Change the data type of the Logged column to Date.
B. Apply the Parse function from the Date transformations options to the Logged column.
C. Create a column by example that starts with 2018-12-31 and set the data type of the new column to Date.
D. Apply a transform to extract the first 11 characters of the Logged column.

Answer: C

Reference: To use a built-in-date hierarchy, you need to set the data type of the new column to Date.

QUESTION 43

You create the following step by using Power Query Editor.

- Table.ReplaceValue(SalesLT_Address,"1318","1319",Replacer.ReplaceText,{"AddressLine1"})

A row has a value of 21318 Lasalle Street in the AddressLine1 column.

What will the value be when the step is applied?

A. 1318
B. 1319
C. 21318 Lasalle Street
D. 21319 Lasalle Street

Answer: D

Reference:

QUESTION 44

You have a Microsoft SharePoint Online site that contain several document libraries.

One of the document libraries contains manufacturing reports saved as Microsoft Excel files. All the manufacturing reports have the same data structure.

You need to use Power BI Desktop to load only the manufacturing reports to a table for analysis.

What should you do?

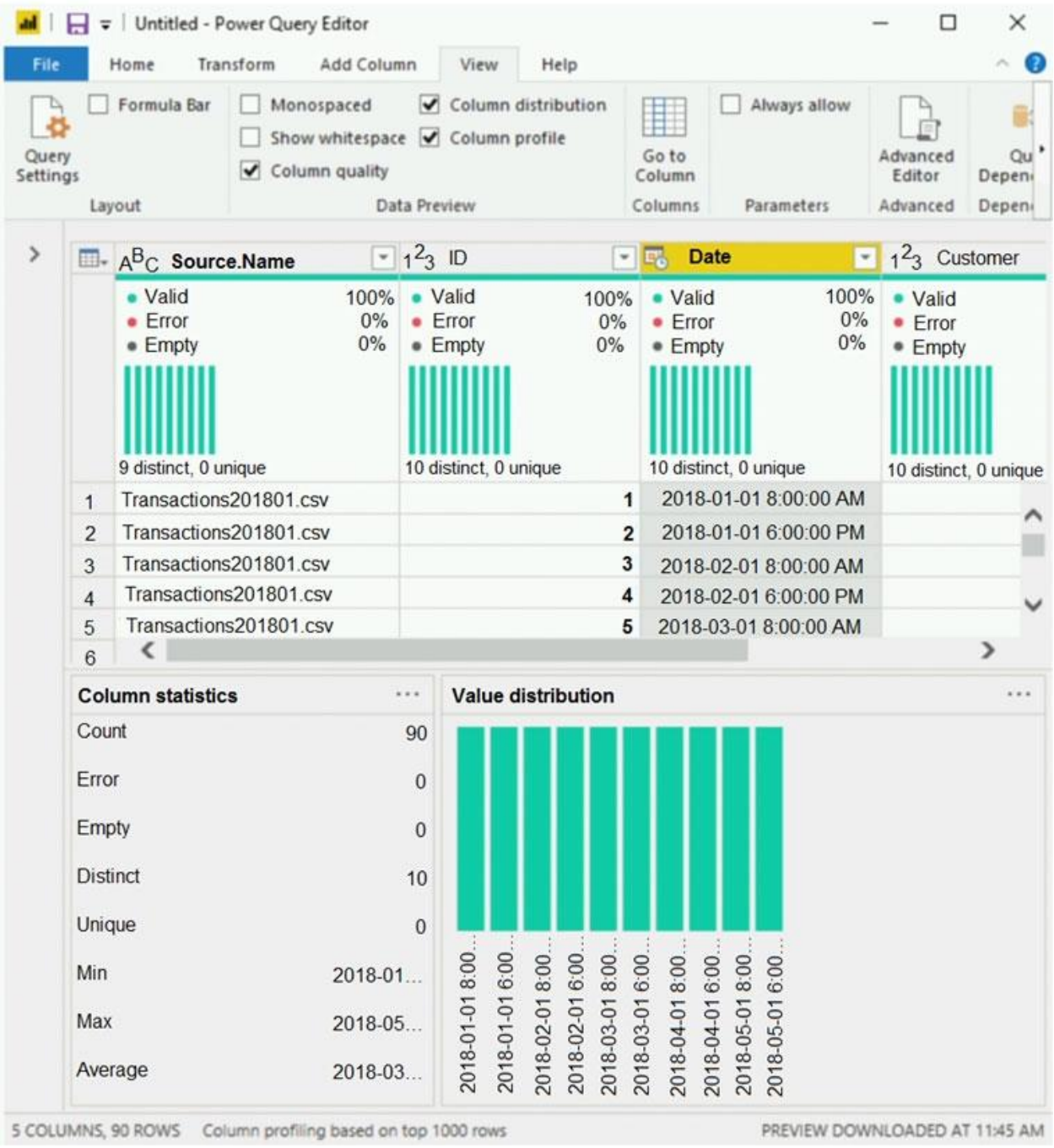
A. Get data from a SharePoint Online folder, enter the site URL, and then select Combine & Load.
B. Get data from a SharePoint Online list and enter the site URL. Select Combine & Transform, then filter by the folder path to the manufacturing reports library.
C. Get data from a SharePoint Online folder and enter the site URL. Select Combine & Transform, then filter by the folder path to the manufacturing reports library.
D. Get data from a SharePoint Online list, enter the site URL, and then select Combine & Load.

Answer: C

Reference:

QUESTION 45

You view a query named Transactions as shown in the following exhibit.



The query gets CSV files from a folder.

Use the drop-down menus to select the answer choice that completes each statement based on the information presented in the graphic.

Answer Area

There are **[answer choice]** CSV files:

- 9
- 10
- 25
- 90
- 1,000

Removing duplicates based on the Date column will reduce the dataset to **[answer choice]** rows:

- 9
- 10
- 25
- 90
- 1,000

Answer:

Box 1: 9

9 distinct CSV files.

Box 2: 10

10 distinct dates.

Reference:

QUESTION 46

Which data profiling tools does Power Query have?

A. Column from examples, custom column, and conditional column
B. Column quality, distribution, and profile
C. Index column and duplicate column
D. Format, extract, and parse

Answer: B

Reference:

QUESTION 47

Which data profiling tool can you use to check the number of errors in a column?

A. Column quality
B. Column distribution
C. Column profile
D. Column quality & column profile

Answer: D

Reference:

QUESTION 48

What can the column distribution be used for?

A. To identify errors
B. To identify empty values
C. To identify primary keys
D. All of the above

Answer: C

Reference:

QUESTION 49

What is the purpose of data profiling in Power Query?

A. Provide a visual way to explore data
B. Get a sense of your dataset composition
C. To solve column quality issues

D. All of the above

Answer: A

Reference:

QUESTION 50

Which data profiling tool provides detailed column statistics and value distribution for a selected column

A. Column quality
B. Column distribution
C. Column profile
D. Column statistics

Answer: C

Reference:

QUESTION 51

When would you use a tool from the Transform tab over the Add Column tab?

A. When you want to overwrite the values of existing columns
B. When you want to keep the values of existing columns
C. When you want to create new columns
D. Both B & C

Answer: A

Reference:

QUESTION 52

What can be useful to create unique IDs and form relationships between tables?

A. Adding a column from examples
B. Grouping data

C. Adding an index column

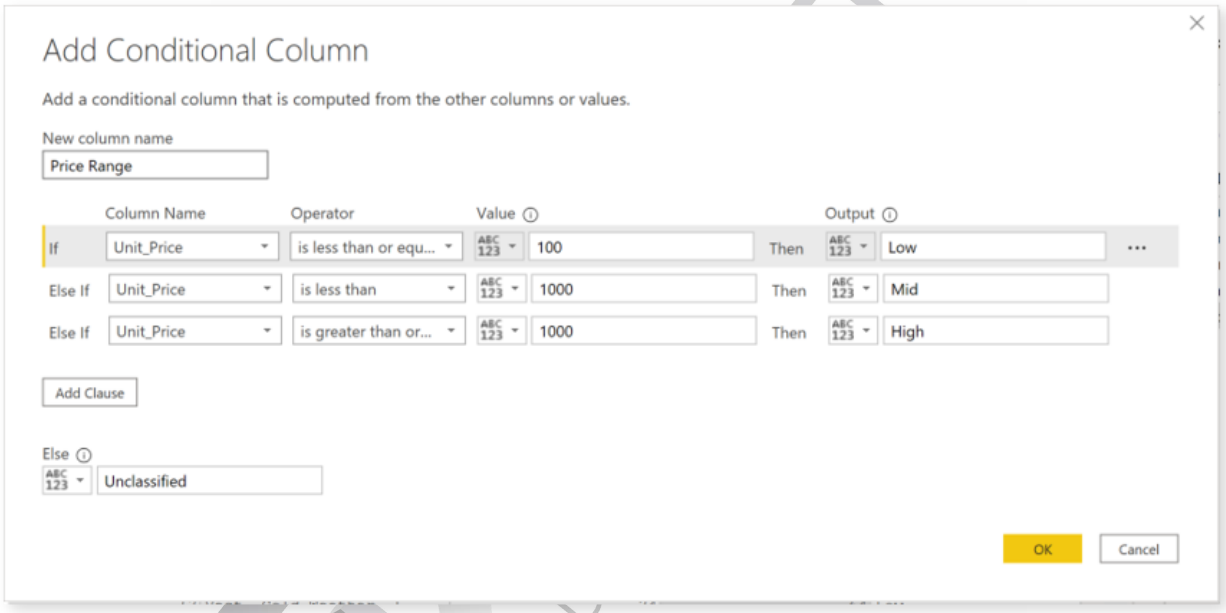
D. Appending queries

Answer: C

Reference:

QUESTION 53

Based on the conditional column above, what Price Range value would be given to a Unit_Price of 500?



A. Low

B. Mid

C. High

D. Unclassified

Answer: B

Reference:

QUESTION 54

Which Power Query tool can you use when you know the outcome of a column you want but don't know which transformation(s) to use?

A. Column from examples
B. Conditional column
C. Custom column
D. Index column

Answer: A

Reference:

QUESTION 55

Which Power Query tool can you use to roll-up daily transaction data into monthly transactions

A. Merging Queries
B. Appending Queries
C. Group By
D. Pivot Columns

Answer: C

Reference:

QUESTION 56

You work as an analyst at Cat Slacks and you've just been handed a csv file with yearly sales by department. After connecting to it in Power BI, you notice that each year has its own column. Which Power Query tool can you use to turn the multiple "Year" columns into rows?

A. Pivot
B. Unpivot
C. Transpose
D. Group By

Answer: B

Reference:

QUESTION 57

Which of these statements is NOT true about merging queries?

A. Merging queries allows you to join tables based on a common column
B. Merging adds columns to an existing table
C. You should merge tables whenever possible
D. You can merge queries by different join kinds (left outer, inner, etc.)

Answer: C

Reference:

QUESTION 58

Which of these operations adds rows to an existing table?

A. Group By
B. Pivoting
C. Merging queries
D. Appending queries

Answer: D

Reference:

QUESTION 59

What happens "under the hood" whenever you apply a transformation in Power Query?

A. The same transformation is applied to the source data
B. The changes are permanent and cannot be modified
C. The Query Editor writes the corresponding DAX code for the applied step
D. The Query Editor writes the corresponding M code for the applied step

Answer: D

Reference:

QUESTION 60

Which two blocks make up the M code that runs your query?

A. do & while
B. if & then
C. for & each
D. let & in

Answer: D

Reference:

QUESTION 61

During your data QA process, you notice that there are null values in the Return type column (Returned, No return, and null). After talking with your manager, you decide to impute (replace) the null values with a value of “No return”. Which of the following actions should you take?

A. Select the Return type column > Transform > Replace values
B. Select the Return type column > Transform > Fill down
C. Select the Return type column > Add column > Column from example
D. Select the Return type column > Home > Remove rows

Answer: A

Reference:

QUESTION 62

You manage a Power BI model that has two tables named Sales and Product.

You need to ensure that a sales team can view only data that has a CountryRegionName value of Unites States and a ProductCategory value of Clothing.

What should you do from Power BI Desktop?

A. Add the following filters to a report. CountryRegionName is United States ProductCategory is Clothing
B. From Power BI Desktop, create a new role that has the following filters. [CountryRegionName] = "United States" [ProductCategory] = "Clothing"
C. Add the following filters in Query Editor. CountryRegionName is United States ProductCategory is Clothing
D. From Power BI Desktop, create a new role that has the following filter. [CountryRegionName] = "United States" && [ProductCategory] = "Clothing"

Answer: B

Reference:

QUESTION 63

You have a table named Sales that contains sales data for the United States. A sample of the data in Sales is shown in the following table.

Zone	Year	SalesAmount
Oregon	2015	100000
Oregon	2016	200000
California	2015	300000
California	2016	500000
Washington	2016	400000

When you attempt to create a map that shows SalesAmount by Zone, you discover that the map shows a bubble based on cities instead of states.

You need to ensure that the map shows bubbles based on states.

What should you do?

A. Add a column named Country that contains United States as the value.
B. Add a column for longitude and a column for latitude.
C. Select the Zone field. From the Modeling tab, change the Data Category.
D. Select the Zone field. From the Modeling tab, change the Data Type.

Answer: C

Reference:

QUESTION 64

You have a query that retrieves data from a Microsoft Azure SQL database.

You discover that a column named ErrorCode has several values starting with a space character, and a column named SubStatus contains several non-printable characters.

You need to remove all the leading whitespaces from ErrorCode and all the non-printable characters from SubStatus. All other data must be retained.

What should you do on each column?

Answer Area

ErrorCode:
- From the Extract menu, click First Characters.
- From the Extract menu, click Length.
- From the Format menu, click Clean.
- From the Format menu, click Trim.

SubStatus:
- From the Extract menu, click First Characters.
- From the Extract menu, click Length.
- From the Format menu, click Clean.
- From the Format menu, click Trim.

Answer: Trim, Clean

Reference:

https://learn.microsoft.com/en-us/powerquery-m/text-trim

https://learn.microsoft.com/en-us/powerquery-m/text-clean

QUESTION 65

From Power BI Desktop, you create a query that imports the following table.

City
UK - London
France - Paris
Spain - Madrid
Canada - Montreal

You need to configure the table to appear as shown in the following table:

City
London
Paris
Madrid
Montreal

What should you do?

A. From the Format menu, click Trim.
B. From the Extract menu, click Last Characters.
C. From the Split Column menu, click By Delimiter.
D. From the Extract menu, click Text After Delimiter.

Answer: D

Reference:

QUESTION 66

You are importing sales data from a Microsoft Excel file named Sales.xlsx into Power BI Desktop.

You need to create a bar chart showing the total sales amount by region.

When you create the bar chart, the regions appear as expected, but the sales amount value displays the count of sales amount instead of the sum of sales amount each region.

You need to modify the query to ensure that the data appears correctly.

What should you do?

A. Delete the query, import the data into Microsoft SQL Server, and then import the data from SQL Server.
B. In Query Editor, add a calculated column that totals the sales amount column.
C. Change the Data Type of sales amount column to Numeric.
D. Refresh the data model.

Answer: C

Reference:

QUESTION 67

You have a Microsoft SQL Server Analysis Services (SSAS) cube that contains historical data.

In Power BI Desktop, you have the following query for the cube.

```
let
      Source = AnalysisServices.Database("msi", "Test", [TypedMeas-
ureColumns=true]),
      Model1 = Source{[Id="Model"]}[Data],
      Model2 = Model1{[Id="Model"]}[Data],
      #"Added Items" = Cube.Transform(Model2,
            {
                  ...
            }),
      #"Changed Type" = Table.TransformColumnTypes(#"Added
Items",{{"FactInternetSales.CarrierTrackingNumber", Int64.Type}}),
      #"Removed Duplicates" = Table.Distinct(#"Changed Type", {"Fac-
tInternetSales.CarrierTrackingNumber"}),
      #"Changed Type1" = Table.TransformColumnTypes(#"Removed Dupli-
cates", {{"FactInternetSales.CustomerPONumber", Int64.Type}})
in
      #"Changed Type1"
```

The query retrieves 25,499 records.

When you check the data warehouse that is the source of the cube, you discover that there are 26,423 records.

You need to ensure that the query retrieves all 26,423 records.

What should you do?

A. From Query Editor, refresh all the data.
B. Change the query to use Live connection mode.
C. Delete the Remove Duplicates step.
D. Add an Unpivot Columns step.

Answer: C

Reference:

QUESTION 68

You plan to use Power BI Desktop to import 100 CSV files.

The files contain data from different stores. The files have the same structure and are stored in a network share.

You need to import the CSV files into one table. The solution must minimize administrative effort.

What should you do?

A. Add a folder data source and use the Combine Files command.
B. Add a folder data source and use the Merge Queries command.
C. Add a Microsoft Excel data source and use the Merge Queries command.
D. Add text/CSV data sources and use the Append Queries command.

Answer: A

Reference:

QUESTION 69

You have the following two queries in Power BI Desktop:

- A query named Query1 that retrieves a table named SMB_Customers from a Microsoft SQL Server database

- A query named Query2 that retrieves a table named Enterprise_Customers from an Oracle Server database

Both tables have the same columns.

You need to combine the data from SMB_Customers and Enterprise_Customers.

Which command should you use?

A. Combine Files
B. Merge Queries
C. Merge Columns
D. Append Queries

Answer: D

Reference:

QUESTION 70

You are previewing an Excel file in Power Query Editor in Power BI Desktop. The file contains data in a matrix format with years on the columns, months on the rows, and sales amount in the values.

You need to shape the data into a table with three columns.

What should you do?

A. Unpivot
B. Pivot
C. Use First Row as Headers
D. Transpose

Answer: A

Reference:

QUESTION 71

You preview a single table into Power Query Editor in Power BI Desktop. The table contains the following columns: LocationName, LocationID, Temperature, and DateTime.

You need to convert the table into a properly formed star schema.

To which table should you add the LocationName field?

A. Temperature Measurements Fact
B. Date Dimension
C. Location Dimension
D. Location Fact

Answer: C

Reference:

QUESTION 72

You have a Power BI model that contains sensor data from 500 sensors that return temperature readings each minute.

Your reporting requirements contain the need to calculate the average temperature from each sensor at every hour. The reports do NOT show the raw data for each minute.

You need to reduce the size of the model to improve performance.

What should you do?

A. Create visuals that group the data by hour.
B. Use Power Query to group the sensor data by hour.
C. And a report filter for the Hour column.
D. Remove the rows that contain readings.

Answer: B

Reference:

QUESTION 73

The two types of tables in a star schema are what?

A. Active and inactive tables
B. Qualitative and quantitative data tables
C. Fact and dimension tables

Answer: C

Reference:

QUESTION 74

What is the difference between a fact table and a dimension table?

A. Fact tables store observations or events while dimension tables contain information about specific entities within the data
B. Fact tables contain information about specific entities while dimension tables contain information about observational data

C. Dimension tables tell you about specific roles in Power BI while fact tables tell you information about facts that are associated with those roles in Power BI

D. There is no difference

Answer: A

Reference:

QUESTION 75

What is Cardinality?

A. Cardinality is how long it takes for the data to load

B. Cardinality is the granularity of the data

C. The direction that the data flows in a relationship between two tables

D. Cardinality is a type of visual element

Answer: C

Reference:

QUESTION 76

What is it called when multiple records in one table are associated with multiple records in another table?

A. many-to-many relationship

B. one-to-many relationship

C. many-to-one relationship

Answer: A

Reference:

QUESTION 77

A dimension that can filter related facts differently is called what?

A. Role-playing dimension

B. Snowflake dimension

C. Degenerate dimension

Answer: A

Reference:

QUESTION 78

What type of table stores details about business entities?

A. Fact table

B. Dimension table

C. Date table

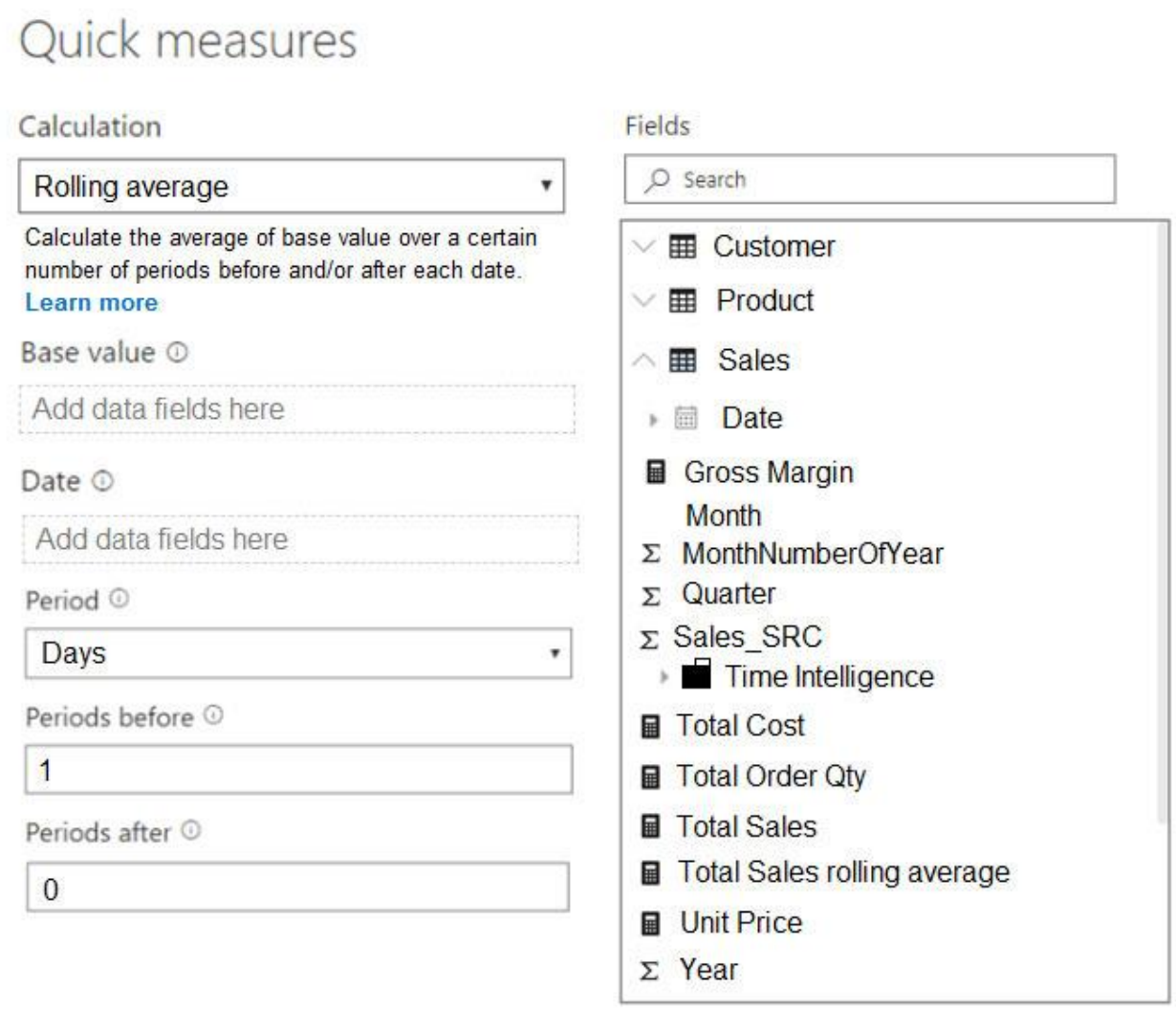
D. Data table

Answer: B

Reference:

QUESTION 79

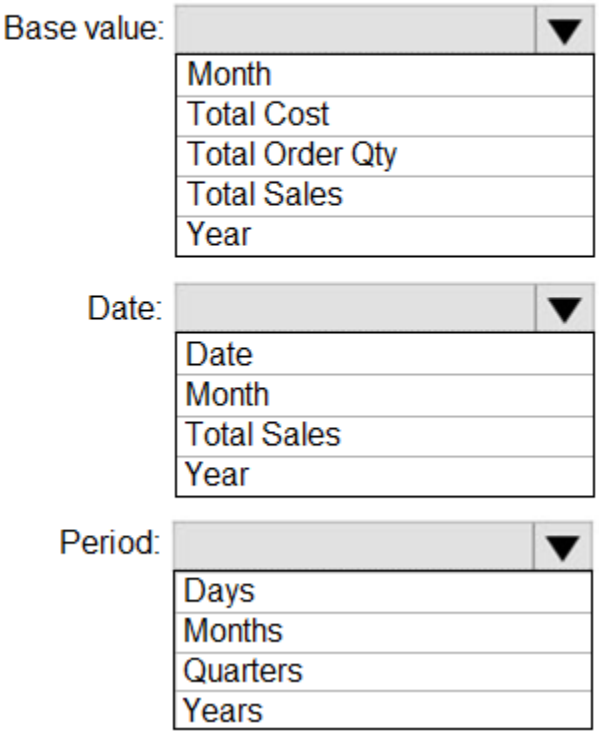
You are creating a quick measure as shown in the following exhibit.



You need to create a monthly rolling average measure for Sales over time.

How should you configure the quick measure calculation?

Answer Area



Answer:

Box 1: Total Sales

Box 2: Date

Box 3: Month

Reference:

QUESTION 80

You have sales data in a star schema that contains four tables named Sales, Customer, Date, and Product. The Sales table contains purchase and ship dates.

Most often, you will use the purchase date to analyze the data, but you will analyze the data by both dates independently and together.

You need to design an imported dataset to support the analysis. The solution must minimize the model size and the number of queries against the data source.

Which data modeling design should you use?

A. Use the Auto Date/Time functionality in Microsoft Power BI and do NOT import the Date table.
B. Duplicate the Date query in Power Query and use active relationships between both Date tables.
C. On the Date table, use a reference query in Power Query and create active relationships between Sales and both Date tables in the modeling view.
D. Create an active relationship between Sales and Date for the purchase date and an inactive relationship for the ship date.

Answer: D

Reference:

QUESTION 81

You build a report to analyze customer transactions from a database that contains the tables shown in the following table.

Table name	Column name
Customer	CustomerID (primary key)
	Name
	State
	Email
Transaction	TransactionID (primary key)
	CustomerID (foreign key)
	Date
	Amount

You import the tables.

Which relationship should you use to link the tables?

A. many-to-many between Customer and Transaction
B. one-to-many from Transaction to Customer
C. one-to-many from Customer to Transaction
D. one-to-one between Customer and Transaction

Answer: C

Reference:

QUESTION 82

You have two tables named Customers and Invoice in a Power BI model. The Customers table contains the following fields:

- CustomerID
- Customer City
- Customer State
- Customer Name
- Customer Address 1
- Customer Address 2
- Customer Postal Code

The Invoice table contains the following fields:

- Order ID
- Invoice ID
- Invoice Date
- Customer ID
- Total Amount
- Total Item Count

The Customers table is related to the Invoice table through the Customer ID columns. A customer can have many invoices within one month.

The Power BI model must provide the following information:

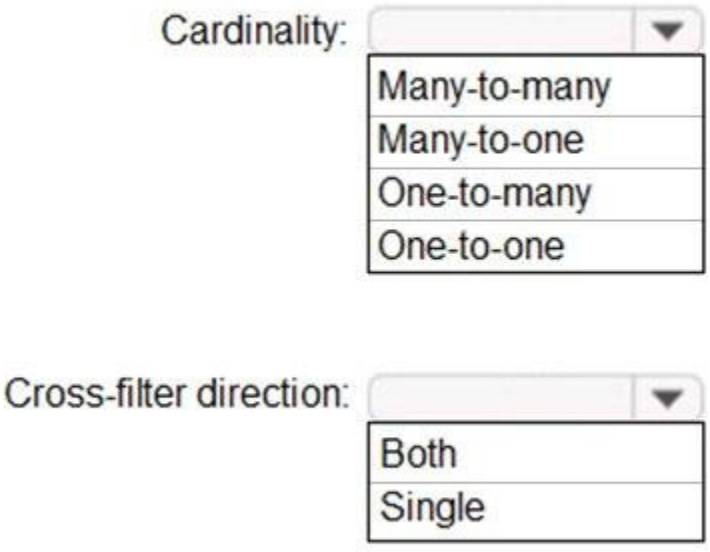
- The number of customers invoiced in each state last month

- The average invoice amount per customer in each postal code

You need to define the relationship from the Customers table to the Invoice table. The solution must optimize query performance.

What should you configure?

Answer Area



Answer:

Box 1: One-to-many

Box 2: Single

Reference:

QUESTION 83

You are creating a Microsoft Power BI data model that has the tables shown in the following table.

Table name	Column name
Sales	SalesID
	ProductID
	DateKey
	SalesAmount
Products	ProductID
	ProductName
	ProductCategoryID
ProductCategory	ProductCategoryID
	CategoryName

The Products table is related to the ProductCategory table through the ProductCategoryID column.

You need to ensure that you can analyze sales by product category.

How should you configure the relationships from Products to ProductCategory?

Answer Area

Cardinality:
- One-to-many
- One-to-one
- Many-to-many

Cross-filter direction:
- Single
- Both

Answer:

Box 1: One-to-many

Box 2: Single

Reference:

QUESTION 84

What turns a collection of independent tables into a data model?

A. Connecting the tables via relationships, based on their common fields
B. Connecting to the tables in a single Power BI file
C. Merging the tables into a single "master" table
D. Giving the tables related names

Answer: A

Reference:

QUESTION 85

Which of these is NOT a data model best practice?

A. Use a star schema with many-to-many relationships
B. Contain relationships with one-way filters (vs. bidirectional)
C. Contain tables that each serve a specific purpose, including data (fact) tables and lookup (dim) tables
D. Only include the data you need for analysis (no redundant or unnecessary records or fields)

Answer: A

Reference:

QUESTION 86

Which of the following fields would typically find in a data table?

A. Product name
B. Retail price
C. Quantity Sold
D. Product Brand

Answer: C

Reference:

QUESTION 87

What is the name of a column or field used to uniquely identify each row of a table?

A. Primary key
B. Foreign key
C. Native key
D. Unique key

Answer: A

Reference:

QUESTION 88

Which of the following statements is NOT true regarding the use of merged tables instead of data models?

A. Merging creates redundant data
B. Merging uses more memory
C. Merging uses more processing power
D. Merging keeps metrics and dimensions in separate tables

Answer: D

Reference:

QUESTION 89

In a one-to-many relationship cardinality, what is the "many" attached to?

A. Primary key
B. Foreign key
C. Index column
D. Lookup table

Answer: B

Reference:

QUESTION 90

Which of the following statements is true regarding filter flow?

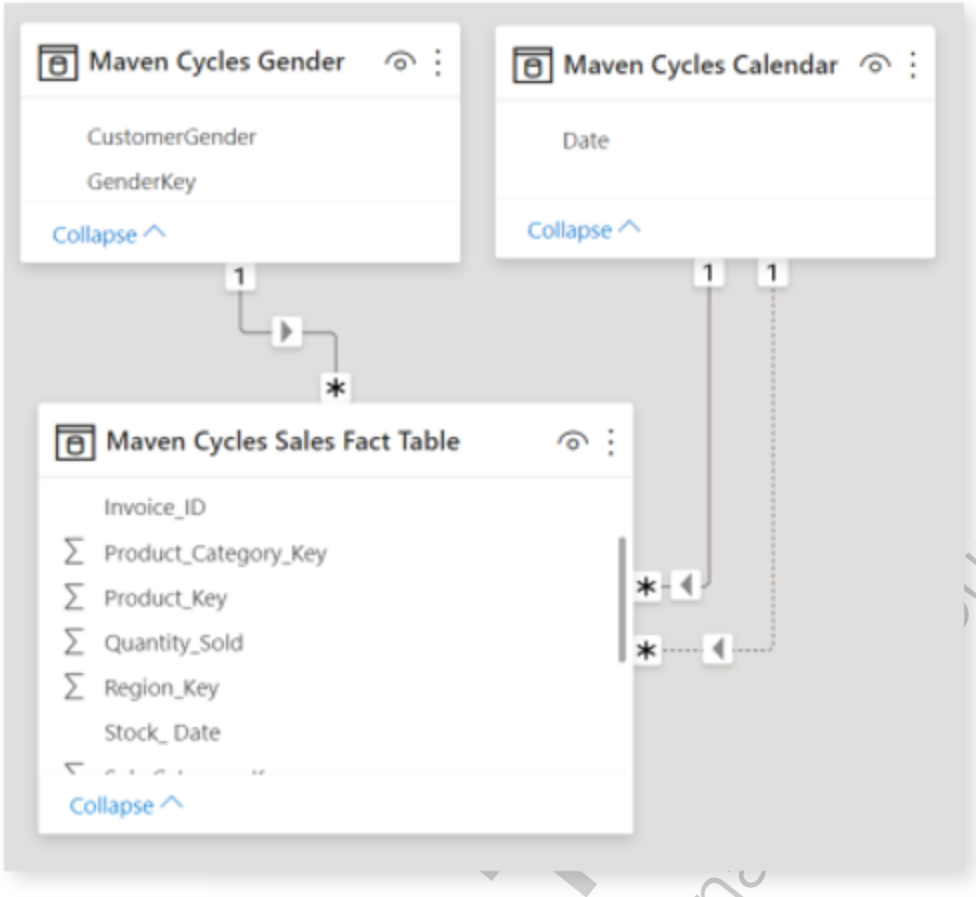
A. By default, the filter direction will point from the "one" side of the relationship to the "many" side
B. When you filter a table, the filter context is passed along to all related "downstream" tables.
C. Filters cannot flow "upstream"
D. All of the above

Answer: D

Reference:

QUESTION 91

How many inactive relationships are there in the model shown above?



A. 1

B. 2

C. 3

D. None

Answer: 1

Reference:

QUESTION 92

Which of these functions can be used to activate inactive relationships?

A. RELATED

B. RELATEDTABLE

C. USERELATIONSHIP

D. ACTIVATE

Answer: C

Reference:

QUESTION 93

If you import or create your own date table, which of these requirements must it meet?

A. Must contain all the days for all years represented in the model

B. Cannot contain duplicate dates

C. Must have at least one field set as a Date or DateTime datatype

D. All of the above

Answer: D

Reference: https://learn.microsoft.com/en-us/power-bi/guidance/model-date-tables

QUESTION 94

You are creating a report in Power BI Desktop.

You are consuming the following tables.

Total name	Column name	Data type
Sales	SalesID	Integer
	SalesDate	Datetime
	TotalPrice	Float
	CustomerID	Integer
	SalesShipDate	Datetime
	StoreID	Varchar(100)
Date	Date	Datetime
	DateKey	Integer
	DateName	Datetime
	MonthNumber	Integer
	MonthName	Varchar(3)
	Year	Integer

You have a new table named Fiscal that has the same schema as the Date table, but contains the fiscal dates of your company.

You need to create a report that displays the total sales by fiscal month and calendar month.

What should you do?

A. Union Fiscal and Date as one table.
B. Add Fiscal to the model and create a one-to-many relationship by using Date[Year] and Fiscal[Year].
C. Add Fiscal to the model and create a one-to-one relationship by using Date[Year] and Fiscal[Year].
D. Merge Fiscal into the Date table.

Answer: D

Reference:

QUESTION 95

You have a Microsoft Excel 2016 workbook that has a Power Pivot model. The model contains the following tables:

- Product (Product_id, Product_Name)

- Sales (Order_id, Order_Date, Product_id, Salesperson_id, Sales_Amount)

- Salesperson (Salesperson_id, Salesperson_name, address)

The model has the following relationships:

- Sales to Product

- Sales to Salesperson

You create a new Power BI file and import the Power Pivot model.

You need to ensure that you can generate a report that displays the count of products sold by each salesperson.

What should you do before you create the report?

A. Create a one-to-one relationship between Product and Salesperson.
B. For each relationship, change the Cross filter direction to Both.
C. For each relationship, change the Cardinality to One to one (1:1).
D. Change a many-to-one relationship between Product and Salesperson.

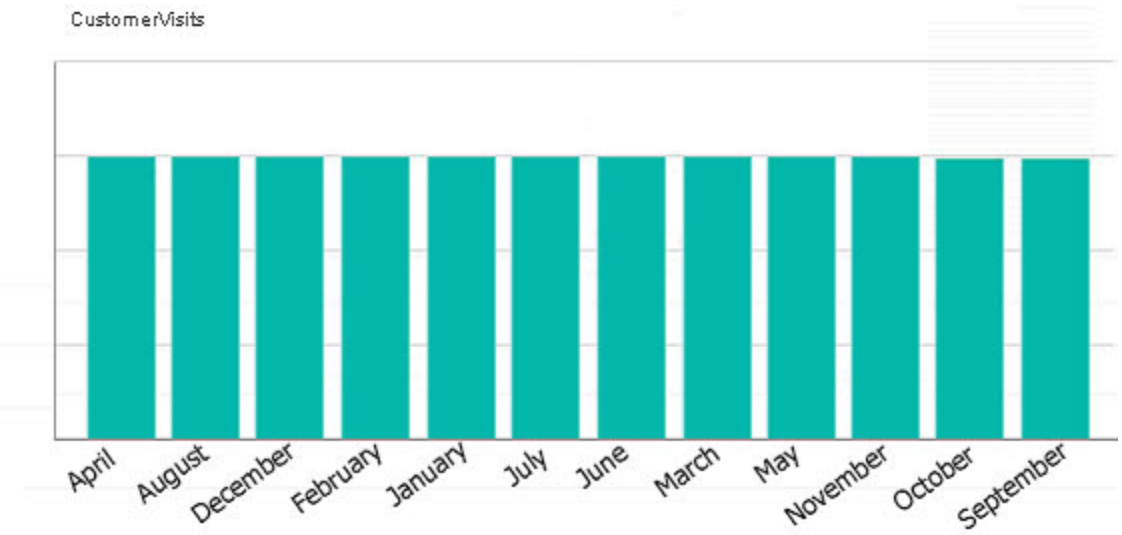
Answer: B

Reference:

QUESTION 96

You have two tables named CustomerVisits and Date in a Power BI model.

You create a measure to calculate the number of customer visits. You use the measure in the report shown in the exhibit.



You discover that the total number of customer visits was 60,000, and that there were only 5,000 customer visits in August.

You need to fix the report to display the correct data for each month.

What should you do?

A. Modify the measure to use the CALCULATE DAX function.
B. Create a relationship between the CustomerVisits table and the Date table.
C. Modify the measure to use the sum DAX function.
D. Create a hierarchy in the Date table.

Answer: B

Reference:

QUESTION 97

You have the following tables.

Table name	Column name	Data Type
Subscriber	SubscriberID	Whole Number
	StartDate	Date
	EndDate	Date
Date	Date	Date
	Day	Text
	Month	Text
	Year	Whole Number

There is a many-to-one relationship from Subscriber to Date that uses Subscriber[StartDate] and Date[Date]. The Cross filter direction of the relationship is set to Single.

You plan to create a column chart that displays the following two measures:

- Count of SubscriberID by Month based on the StartDate

- Count of SubscriberID by Month based on the EndDate

What should you do before you create the measures?

A. Create an active one-to-one relationship from Subscriber[StartDate] to Date[Date].
B. Change the Cross filter direction of the active relationship to Both.
C. Change the active relationship for many-to-one.
D. Create an inactive many-to-one relationship from Subscriber[StartDate] to Date[Date].

Answer: D

Reference:

QUESTION 98

You have a query that retrieves sales data. A sample of the data is shown in the following table.

Date	CustomerId	ProductId	Quantity
10/10/2016	8877	8878	5
null	8877	8879	5
null	8877	8880	5
10/11/2016	5723	1234	2
null	5723	1235	3
null	5723	1236	5
null	5723	1237	10
10/12/2016	4356	4401	11
null	5723	4908	2

You need to ensure that the values in the Date column contain a date. Null values must be replaced with the date from the previous row.

What should you click on the Transform tab in Query Editor?

A. Format, and then Clean
B. Date, and then Earliest
C. Fill, and then Down
D. Replace Values, and then Replace Errors

Answer: C

Reference:

QUESTION 99

You have a table named Sales. A sample of the data in Sales is shown in the following table.

SalesOrderID (WholeNumber)	ProductName (Text)	OrderQty (Whole Number)	OrderDate (Date)	UnitPrice (Decimal Number)	TotalPrice (Decimal Number)
71774	Bike	1	May 1, 2017	356.898	356.898
71774	Car	1	May 1, 2017	356.898	356.898
71775	Train	1	May 2, 2017	1430.442	1430.442
71775	Puzzle	3	May 2, 2017	63.9	191.7
71775	Skateboard	4	May 3, 2017	32.394	129.576
71776	Doll	1	May 4, 2017	63.9	63.9

You create a stacked column chart visualization that displays ProductName by Date.

You discover that the axis for the visualization displays all the individual dates.

You need to ensure that the visualization displays ProductName by year and that you can drill down to see ProductName by week and day.

What should you do first?

A. Create a new table that has columns for the date, year, week, and day.
B. Create a new hierarchy in the Sales table.
C. Format the visualization and set the type of the X-Axis to Categorical.
D. Configure a visual filter for the Date column that uses an advanced filter.

Answer: A

Reference:

QUESTION 100

You have a Power BI data model that contains a Sale Date table.

You need to add a second date table named Ship Date that contains the same columns as those in Sale Date. The solution must NOT repeat the query logic.

What should you do to create the query for Ship Date?

A. Reference the Sale Date query.
B. Duplicate the Sale Date query.
C. Rename the Sale Date query to Ship Date.
D. Append the Sale Date query as a new query.

Answer: D

Reference:

QUESTION 101

You need to create a relationship between two tables named Sales and Sales Detail in a Power BI data model. For every row in the Sales table, there is at least one row, and possibly multiple rows, in the Sales Detail table.

How should you configure the relationship?

A. one-to-one from Sales to Sales Detail
B. one-to-many from Sales to Sales Detail
C. many-to-many from Sales to Sales Detail
D. many-to-one from Sales to Sales Detail

Answer: B

Reference:

QUESTION 102

You have a Power BI data model that has the following tables: Sales, Returns, Customer, and Date. No relationships have been created.

You need to view and filter sales and returns by the same months at the same time.

What three actions should you perform? Each correct answer presents part of the solution.

A. Create a DAX measure that combines sales and returns.
B. Create a month column in both the Sales and Returns tables.
C. Create a relationship between Sales and Date.
D. Create a relationship between the Returns and Date.
E. Select the Date table and select Mark as date table.

Answer: B, C, D

Reference:

QUESTION 103

Which are calculated on demand?

A. Calculated columns
B. Calculated tables
C. Measures

Answer: C

Reference:

QUESTION 104

Which are calculated based on the filters that are used by the report user? Calculated columns or measures?

A. Measures
B. Calculated columns

Answer: A

Reference:

QUESTION 105

Which DAX function evaluates an expression in a modified filter context?

A. SUMX
B. CALCULATE
C. ALL

Answer: B

Reference:

QUESTION 106

Why would you want to override the default context?

A. To create measures that behave according to the user's selection
B. To create measures that behave according to your intentions, regardless of what the user selects

Answer: B

Reference:

QUESTION 107

What type of Measure uses SUM to aggregate over one set of dimensions and a different aggregation over a different set of dimension?

A. Additive
B. Aggregate
C. Semi-additive

Answer: C

Reference:

QUESTION 108

What type of functions enable you to manipulate data using time periods?

A. Time intelligence
B. Comparer functions
C. Value functions

Answer: A

Reference:

QUESTION 109

Which two functions will help you compare dates to the previous month?

A. TOTALYTD and PREVIOUSMONTH
B. CALCULATE and TOTALTYD
C. CALCULATE and PREVIOUSMONTH

Answer: C

Reference:

QUESTION 110

You have an API that returns more than 100 columns. The following is a sample of column names.

- client_notified_timestamp

- client_notified_source

- client_notified_sourceid

- client_notified_value

- client_responded_timestamp

- client_responded_source

- client_responded_sourceid

- client_responded_value

You plan to include only a subset of the returned columns.

You need to remove any columns that have a suffix of sourceid.

How should you complete the Power Query M code?

To answer, select the appropriate options in the answer area.

Answer Area

```
let

 Source = …,
 rawData = Source{[tableId= "clientData"]}[Data],
 removeSources = [ Table.CombineColumn | Table.FindText | Table.FromList | Table.RemoveColumns ] (rawData,
                 [ List.Contains | List.Select | Table.FindText | Table.FromList ] (Table.ColumnNames(rawData),
                     each [ Text.Contains | Text.EndsWith | Text.From | Text.StartsWith ] (_, "sourceid")))
   in
        removeSources
```

Answer:

Box 1: Table.RemoveColumns

Box 2: List.Select

Box 3: Text.EndsWith

Reference:

QUESTION 111

You import two Microsoft Excel tables named Customer and Address into Power Query. Customer contains the following columns:

- Customer ID

- Customer Name

- Phone

- Email Address

- Address ID

Address contains the following columns:

- Address ID

- Address Line 1

- Address Line 2

- City

- State/Region

- Country

- Postal Code

The Customer ID and Address ID columns represent unique rows.

You need to create a query that has one row per customer. Each row must contain City, State/Region, and Country for each customer.

What should you do?

A. Merge the Customer and Address tables.
B. Transpose the Customer and Address tables.
C. Group the Customer and Address tables by the Address ID column.
D. Append the Customer and Address tables.

Answer: A

Reference:

QUESTION 112

You have a data model that contains many complex DAX expressions. The expressions contain frequent references to the RELATED and RELATEDTABLE functions.

You need to recommend a solution to minimize the use of the RELATED and RELATEDTABLE functions.

What should you recommend?

A. Split the model into multiple models.
B. Hide unused columns in the model.
C. Merge tables by using Power Query.
D. Transpose.

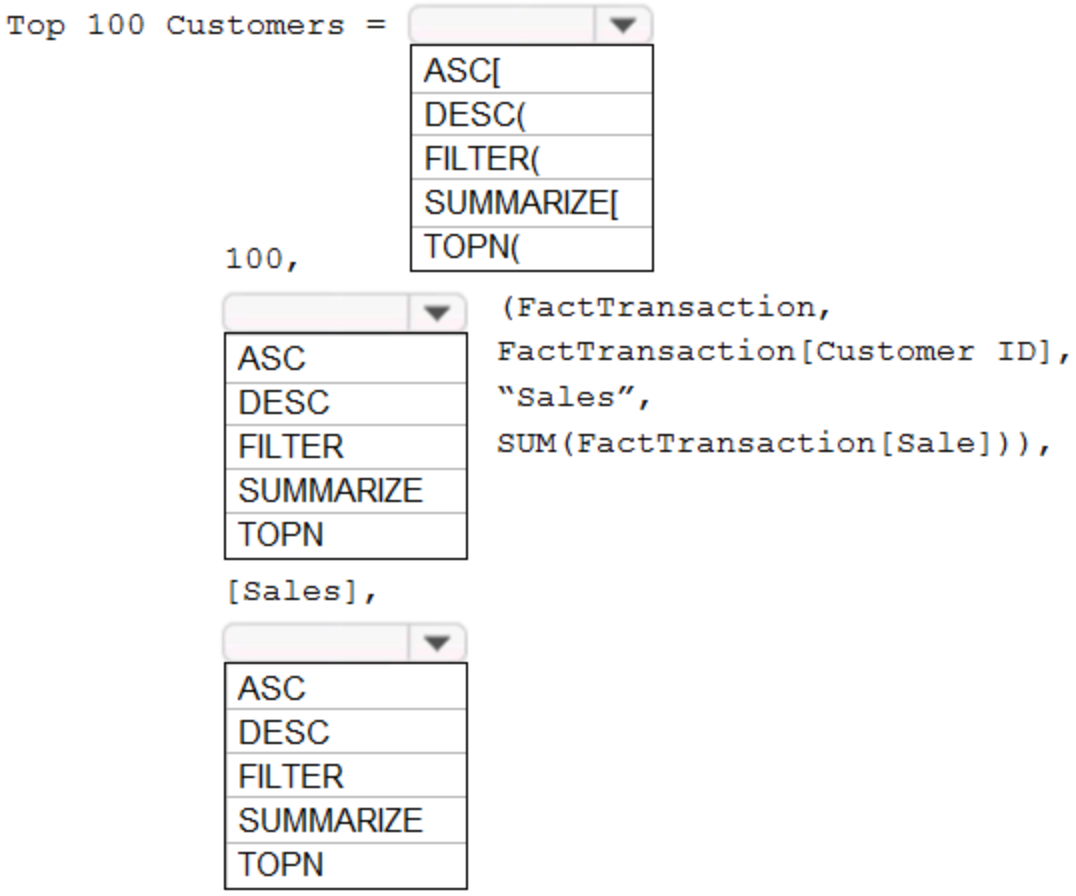
Answer: C

Reference:

QUESTION 113

You have a Power BI report. You need to create a calculated table to return the 100 highest spending customers. How should you complete the DAX expression?

Answer Area



Answer:

Box 1: TOPN

Box 2: SUMMARIZE

Box 3: DESC

Reference:

QUESTION 114

Your company has affiliates who help the company acquire customers.

You build a report for the affiliate managers at the company to assist them in understanding affiliate performance.

The managers request a visual showing the total sales value of the latest 50 transactions for each affiliate.

You have a data model that contains the following tables.

Table name	Column name
Transactions	TransactionDate
	ItemsOrdered
	Amount
	AffiliateID
	TransactionID
Affiliate	AffiliateID
	Name

The Affiliate table has a one-to-many relationship to the Transactions table based on the AffiliateID column.

You need to develop a measure to support the visual.

How should you complete the DAX expression?

Answer Area

```
Revenue Last 50 Transactions =
    [CALCULATE | CONCATENATEX | SUM | SUMX | TOPN] (
        [CALCULATE | CONCATENATEX | SUM | SUMX | TOPN] (Transactions[Amount]),
        [CALCULATE | CONCATENATEX | SUM | SUMX | TOPN] (50, Transactions, Transactions [TransactionID] | [Amount], | [ItemsOrdered], | [TransactionDate],
    DESC)
    )
```

Answer:

Box 1: CALCULATE

Box 2: SUM

Box 3: TOPN

Box 4: [TransactionID]

Reference:

QUESTION 115

You need to create a component measure that can be used as an input for a Percent of all returns calculation. The component measure needs to always show total returns, regardless of external filter context. Which of the following measures should you create?

A. CALCULATE([Total Orders], ALL(Returns))

B. SUMX('Returns', 'Returns'[quantity returned])
C. CALCULATE([Total Returns], ALL(Returns))
D. SUM(Returns[quantity returned])

Answer: C

Reference:

QUESTION 116

You start building out a dynamic calendar table in the query editor. Which of the following statements would you use to create a Start of Week column that begins on Monday?

A. Table.AddColumn(#"Inserted Day Name", "Start of Week", each Date.StartOfWeek([Date],Day.Sunday), type date)
B. Table.AddColumn(#"Inserted Day Name", "Start of Week", each Date.StartOfWeek([Date],Day.Monday), type date)
C. Table.AddColumn(#"Inserted Day Name", "Start of Week", each Date.EndOfWeek([Date],Day.Sunday), type date)
D. Table.AddColumn(#"Inserted Day Name", "Start of Week", each Date.EndOfWeek([Date],Day.Tuesday), type date)

Answer: B

Reference:

QUESTION 117

What does DAX stand for, in the context of Power BI?

A. Data Analysis Expressions
B. Data & Analysis Exchange
C. Data Aggregation Expressions
D. Dogs Against Xylophones

Answer: A

Reference:

QUESTION 118

Where should you create calculated columns to reduce model size and improve performance?

A. Source data
B. Power Query
C. Data model
D. They all achieve the same results

Answer: A

Reference:

QUESTION 119

Which of the following is NOT true about measures?

A. They are evaluated based on row context
B. They reference entire tables or columns
C. They aren't visible within tables
D. They recalculate in response to any change to filters within the report

Answer: A

Reference:

QUESTION 120

In what field do measures typically "live" in a visual?

A. Rows
B. Columns
C. Values
D. Filters

Answer: C

Reference:

QUESTION 121

Which of these DAX function categories loops through the same calculation on each row of a table, then aggregates the results?

A. Logical Functions
B. Filter Functions
C. Stats Functions
D. Iterator Functions

Answer: D

Reference:

QUESTION 122

Which of the following functions modifies and overrules any competing filter context?

A. CALCULATE
B. SUMX
C. RELATED
D. REPLACE

Answer: A

Reference:

QUESTION 123

Which of the following functions removes filter context?

A. CALCULATE
B. ALL

C. FILTER

D. All of the above

Answer: B

Reference:

QUESTION 124

Which of the following functions returns a table?

A. TOPN

B. FILTER

C. DATEADD

D. All of the above

Answer: D

Reference:

QUESTION 125

Which of the following is NOT true about CALCULATE modifiers?

A. They are used to change filter context

B. They are used to access inactive table relationships

C. They allow you to drag and drop fields rather than write DAX from scratch

D. They are used to change the way filters propagate

Answer: C

Reference:

QUESTION 126

Which of the following functions allows you to calculate running totals?

A. DATESYTD

B. DATEADD

C. DATESINPERIOD

D. All of the above

Answer: C

Reference:

QUESTION 127

You have a table named Sales. Sales contains the data shown in the following table.

Year	Total Sales
2015	26,250,801.43
2016	32,890,351.72
2017	11,685,099.08

You have the following measure.

Total Sales This Year = SUM([Total Sales])

You plan to create a KPI to compare the current yearly sales to the previous year as shown in the exhibit.

You need to create the measure for the goal.

How should you complete the DAX formula?

Answer: CALCULATE, DATEADD

Reference:

QUESTION 128

You have a Power BI model that contains the following two tables:

- Sales(Sales_ID, sales_date, sales_amount, CustomerID)

- Customer(CustomerID, First_name, Last_name)

There is a relationship between Sales and Customer.

You need to create a measure to rank the customers based on their total sales amount.

Which DAX formula should you use?

A. RANKX(ALL(Sales), SUMX(RELATEDTABLE(Customer), [Sales_amount]))
B. TOPN(ALL(customer), SUMX(RELATEDTABLE(Sales), [Sales_amount]))
C. RANKX(ALL(customer), SUMX(RELATEDTABLE(Sales), [Sales_amount]))
D. RANK.EQ(Sales[sales_amount], Customer[CustomerID])

Answer: C

Reference:

QUESTION 129

You have a Power BI model that contains the following two tables:

- Sales (Sales_ID, DateID, sales_amount)

- Date(DateID, Date, Month, Week, Year)

The tables have a relationship.

You need to create a measure to calculate the sales for same period from the previous year.

Which DAX formula should you use?

A. SUM(sales[sales_amount]) - CALCULATE(SUM(sales[sales_amount]), DATESYID('Date'[Date]))
B. CALCULATE(SUM(sales[sales_amount]), SAMEPERIODLASTYEAR('Date'[Date]))
C. SUM(sales[sales_amount]) "" CALCULATE(SUM(sales[sales_amount]), SAMEPERIODLASTYEAR('Date'[Date]))
D. CALCULATEx(SUM(sales(sales_amount]), DATESYID('Date'[Date]))

Answer: B

Reference:

QUESTION 130

You have a Power BI model that has a date table. A sample of the data shown in the following table.

Date	Day	Week	Month	Year
2014-12-01	1	27	12	2014
2014-12-02	2	27	12	2014
2014-12-03	3	27	12	2014
2014-12-04	4	27	12	2014

You need to add a column to display the date in the format of December 01, 2014.

Which DAX formula should you use in Power BI Desktop?

A. FORMAT([Date], "MMM") & " " & FORMAT([Date], "DD") & ", " & FORMAT([Date], "YYYY")
B. FORMAT([Date], "M") & " " & FORMAT([Date], "D") & ", " & [Date].[Year])

C. [Date].[Month] & " " & FORMAT([Date], "D") & ", " & [Date].[Year])

D. FORMAT([Date], "MMMM DD, YYYY")

Answer: D

Reference:

QUESTION 131

You are creating a work schedule for a retail store.

You have the following data from a query named Schedule.

Employee	Scheduled
Ike	1 Sunday
Ted	1 Sunday
Jonathan	2 Monday
Ike	3 Tuesday
Vivek	3 Tuesday
Margo	4 Wednesday
Margo	5 Thursday
Ted	6 Friday
Jonathan	7 Saturday
Margo	7 Saturday

You need to visualize the data as shown in the following exhibit.

You add a matrix visualization, and then you add Employee to the rows and Scheduled to columns.

Which DAX formula should you use to create the measure that will display the checkboxes?

Values

COUNTA | COUNTROWS | COUNTIX | LOWER | UNICHAR | UPPER

Answer Area

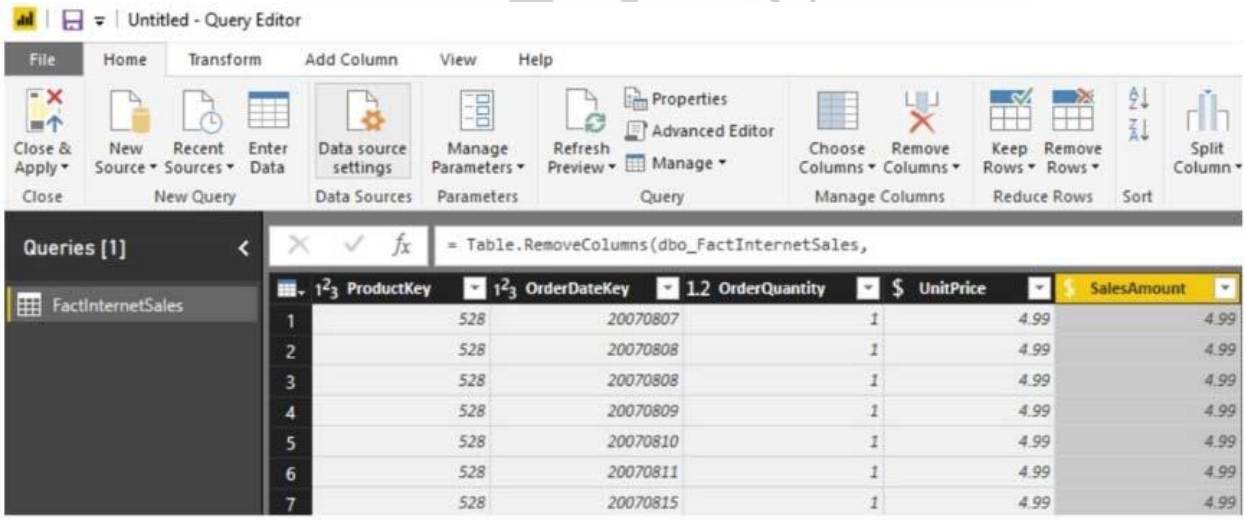
```
Schedule Display
=

IF(
    [Value] (Schedule)>0,
        [Value] (9635), "")
```

Answer: COUNTROWS, UNICHAR

Reference:

QUESTION 132

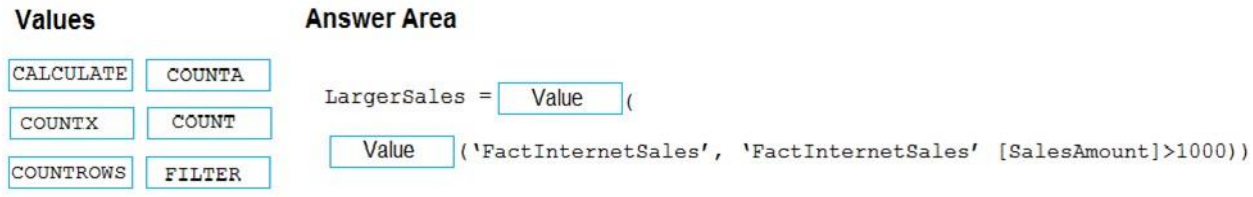
You have a property named FactInternetSales used by several Power BI reports. The query is shown in the exhibit.



You plan to create a bar chart showing the count of sales by year that have a SalesAmount greater than $1,000.

You need to create a measure that will be used in the bar chart.

How should you complete the DAX formula?



Answer: COUNTROWS, FILTER

Reference:

QUESTION 133

You have a Power BI model for sales data. You create a measure to calculate the year-to-date sales.

You need to compare the year-to-date sales with the previous year for the same time period.

Which DAX function should you use?

A. LASTDATE
B. TOTALYTD
C. SAMEPERIODLASTYEAR
D. PREVIOUSYEAR
E. DATEADD
F. DATESVTD

Answer: C

Reference:

QUESTION 134

You have a Power BI model that contains tables named Sales and Date. Sales contains four columns named SalesAmount, OrderDate, SalesPerson, and OrderID.

You need to create a measure to calculate the last 12 months of sales. You must start from the last date a sale was made and ignore any filters set on the report.

How should you complete the DAX formula?

Values

ALLEXCEPT | DATEDIFF | LASTNONBLANK | DATEADD | LASTDATE

Answer Area

```
Last12monthSales=

Var varlast12m=
  CALCULATE ( [Value] (
  [Value] (Sales[OrderDate]
    ,SUM(Sales
    [SalesAmount])
    )
    ,-12
    ,MONTH)
```

Answer: DATEADD, LASTNONBLANK

Reference:

QUESTION 135

You have a Power BI model that contains a table named Person. Person contains a whole number column named Age.

You need to write a DAX measure that finds the middle value in the range of Age values.

Which two formulas should you use? Each answer presents a complete solution.

A. MEDIAN('Person'[Age])
B. PERCENTILE.INC(('Person'[Age], 0.5)
C. AVERAGE('Person'[Age])
D. RANK.EQ('Person'[Age], 'Person'[Age])

Answer: B, C

Reference:

QUESTION 136

You have a Power BI model that contains the following two tables:

- Assets (AssetID, AssetName, Purchase_DateID, Value)

- Date (DateID, Date, Month, Week, Year)

The tables have a relationship. Date is marked as a date table in the Power BI model.

You need to create a measure to calculate the percentage that the total assets value increased since one year ago.

Which DAX formula should you use?

A. (sum(Assets[Value]) – CALCULATE(sum(Assets[Value]),SAMEPERIODLASTYEAR('Date'[Date])))/CALCULATE(sum(Assets[Value]),SAMEPERIODLASTYEAR ('Date' [Date]))
B. CALCULATE(sum(Assets[Value]), SAMEPERIODLASTYEAR("~Date'[Date]))/ (sum(Assets[Value])
C. CALCULATE(sum(Assets[Value]),DATESYTD(("~Date'[Date]))/ (sum(Assets[Value])
D. sum(Assets[Value]) / CALCULATE(sum(Assets[Value]), SAMEPERIODLASTYEAR('Date'[Date]))

Answer: A

Reference:

QUESTION 137

You need to write a DAX measure that returns the revenue for selected dates during the previous year.

Which two DAX functions should you include in the measure? Each correct answer presents part of the solution.

A. CALCULATE
B. CLOSINGBALANCEYEAR
C. PREVIOUSQUARTER
D. SAMEPERIODLASTYEAR

Answer: A, D

Reference:

QUESTION 138

You need to create a role-playing dimension using DAX. Which type of DAX expression should you use?

A. Calculated column
B. Calculated table
C. Measure
D. What-If analysis

Answer: B

Reference:

QUESTION 139

What benefit do you get from analyzing metadata?

A. The benefit of analyzing metadata is that you can clearly identify data inconsistencies with your dataset.
B. The benefit of analyzing the metadata is to get familiar with your data.
C. The benefit of analyzing the metadata is to know the number of rows, columns and tables being loaded into your model.

Answer: A

Reference:

QUESTION 140

Which tool enables you to identify bottlenecks that exist in code?

A. Q&A.
B. Column profiling.

C. Performance analyzer.

Answer: C

Reference:

QUESTION 141

What is cardinality?

A. Cardinality is the granularity of the data.
B. Cardinality is how long it takes for the data to load.
C. Cardinality is a type of visual element.
D. Cardinality is a term that is used to describe the uniqueness of the values in a column. Relationship cardinality refers to the number of rows from one table that are related to another (one to one, one to many, many to many).

Answer: D

Reference:

QUESTION 142

Which Power BI option gives you the option to send fewer queries and disable certain interactions?

A. Direct query
B. Query reduction
C. Query diagnostics

Answer: B

Reference:

QUESTION 143

Other than Power BI, another place for performance optimization can be performed is where?

A. At the data source

B. In the Power BI service

C. In Microsoft SharePoint

Answer: A

Reference:

QUESTION 144

Is it possible to create a relationship between two columns if they are different DATA TYPE columns?

A. Yes, if cardinality of the relationship is set to Many-to-Many.

B. Yes, the above is fully supported in latest version of Power BI desktop.

C. No, both columns in a relationship must be sharing the same DATA TYPE.

Answer: C

Reference:

QUESTION 145

A critical aspect of data aggregation is that it allows you to focus on what?

A. The important and most meaningful data

B. Disabling interactive analysis over big data

C. Larger cache size and decreased query performance

Answer: A

Reference:

QUESTION 146

Before you start creating aggregations, you should first decide what?

A. The storage mode of your aggregation

B. The granularity (level) on which to create them.

Answer: B

Reference:

QUESTION 147

Table name	Column name
Campaigns	Campaign_ID
	Name
Ads	Ad_id
	Name
	Campaign_id
Impressions	Impression_id
	Ad_id
	Site_name
	Impression_time
	Impression_date

The Impressions table contains approximately 30 million records per month.

You need to create an ad analytics system to meet the following requirements:

- Present ad impression counts for the day, campaign, and Site_name. The analytics for the last year are required.

- Minimize the data model size.

Which two actions should you perform?

A. Group the impressions by Ad_id, Site_name, and Impression_date. Aggregate by using the CountRows function.
B. Create one-to-many relationships between the tables.
C. Create a calculated measure that aggregates by using the COUNTROWS function.
D. Create a calculated table that contains Ad_id, Site_name, and Impression_date.

Answer: A, B

Reference:

QUESTION 148

You have a Microsoft Power BI report. The size of PBIX file is 550 MB. The report is accessed by using an App workspace in shared capacity of powerbi.com.

The report uses an imported dataset that contains one fact table. The fact table contains 12 million rows. The dataset is scheduled to refresh twice a day at 08:00 and 17:00.

The report is a single page that contains 15 AppSource visuals and 10 default visuals.

Users say that the report is slow to load the visuals when they access and interact with the report.

You need to recommend a solution to improve the performance of the report.

What should you recommend?

A. Change any DAX measures to use iterator functions.
B. Replace the default visuals with AppSource visuals.
C. Change the imported dataset to DirectQuery.
D. Remove unused columns from tables in the data model.

Answer: C

Reference:

QUESTION 149

You have a large dataset that contains more than 1 million rows. The table has a datetime column named Date.

You need to reduce the size of the data model without losing access to any data.

What should you do?

A. Round the hour of the Date column to startOfHour.
B. Change the data type of the Date column to Text.
C. Trim the Date column.

D. Split the Date column into two columns, one that contains only the time and another that contains only the date.

Answer: D

Reference:

QUESTION 150

You are configuring a Microsoft Power BI data model to enable users to ask natural language questions by using Q&A.

You have a table named Customer that has the following measure.

Customer Count = DISTINCTCOUNT(Customer[CustomerID])

Users frequently refer to customers as subscribers.

You need to ensure that the users can get a useful result for "subscriber count" by using Q&A. The solution must minimize the size of the model.

What should you do?

A. Set Summarize By to None for the CustomerID column.
B. Add a synonym of "subscriber" to the Customer table.
C. Add a synonym of "subscriberID" to the CustomerID column.
D. Add a description of "subscriber count" to the Customer Count measure.

Answer: B

Reference:

QUESTION 151

Which of the following is not a best practice when using the Q&A visual?

A. Fix incorrect data types
B. Add axis labels to all the charts
C. Add missing relationships between tables

D. Add synonyms to tables and columns

Answer: B

Reference:

QUESTION 152

From the Home tab in Power BI Desktop, you click Enter Data and create a table named Sales that contains the following data.

Region	Sales
Canada	100
Canada	900
Italy	500
Spain	800
US	200
US	1000

You add Region and Sales to visualization and the visualization displays the following data.

Sales	Region
1000	Canada
500	Italy
800	Spain
1200	US

What causes the visualization to display four rows of data instead of six?

A. the Data Category of Region

B. the Default Summarization on Region

C. the Default Summarization on Sales

D. the Data Category of Sales

Answer: C

Reference:

QUESTION 153

You need to create a custom visualization for Power BI.

What should you install first?

A. jQuery
B. Node.js
C. Microsoft Azure PowerShell
D. Microsoft.NET

Answer: B

Reference:

QUESTION 154

You create a Power BI model that contains the sales for the last five years. The size of the model is 950 MB. The Sales table contains five million rows.

You need to minimize the model size and perform the following analysis:

Current and one previous year sales for all active products

Current year sales by product category

What should you do?

A. Remove the Product Status column.
B. Remove the rows that relate to inactive products.
C. Remove the rows that relate to sales that occurred more than two years earlier.
D. Remove the Sale Date column.

Answer: C

Reference:

QUESTION 155

You have a Power BI data model that contains a table named Contacts.

Contacts contains the following text columns:

Name

Email

Phone

Subscribed to Newsletter

The Phone column contains the area code, number, and country code. The Subscribed to Newsletter column contains a value of true or false.

You need to minimize the size of the data model by changing a column's data type. The solution must prevent data loss. What should you do?

A. Change Phone to a decimal data type.
B. Change Phone to a whole number data type.
C. Change Subscribed to Newsletter to a binary data type.
D. Change Subscribed to Newsletter to a True/False data type.

Answer: D

Reference:

QUESTION 156

What is the benefit of using a report tooltip?

A. To give users the ability to export data from the visual.
B. To provide additional detail that is specific to the context of the data that is being hovered over.
C. To give users additional information about a report visual, such as the author and date/time it was created.

Answer: B

Reference:

QUESTION 157

Do you need to import custom visuals each time you want to use them when you are developing a new report?

A. Yes, custom visuals must be imported from AppSource each time you start developing a new report.
B. No, custom visuals are always available for selection under the Visualization pane.
C. No, custom visuals only need to be imported once and will always remain in Power BI for future use in a new report.

Answer: A

Reference:

QUESTION 158

Which of the following filters are not available in Power BI reports?

A. Drillthrough
B. Report level
C. Page type
D. Page level

Answer: C

Reference:

QUESTION 159

How can you analyze performance of each of your report elements?

A. By using performance analyzer.
B. By analyzing your metadata.
C. By deleting unnecessary rows and columns to reduce your dataset size.

Answer: A

Reference:

QUESTION 160

Can you use bookmarks to create a slide show in Power BI?

A. No, you cannot, because bookmarks are not dynamic.
B. Yes, you can, by adding buttons as navigation to go between saved bookmarks.
C. No, you will require a specific visual to achieve this task.

Answer: B

Reference:

QUESTION 161

You have a custom connector that returns ID, From, To, Subject, Body, and Has Attachments for every email sent during the past year. More than 10 million records are returned.

You build a report analyzing the internal networks of employees based on whom they send emails to.

You need to prevent report recipients from reading the analyzed emails. The solution must minimize the model size.

What should you do?

A. Implement row-level security (RLS) so that the report recipients can only see results based on the emails they sent.
B. Remove the Subject and Body columns during the import.
C. From Model view, set the Subject and Body columns to Hidden.

Answer: B

Reference:

QUESTION 162

Your company has training videos that are published to Microsoft Stream. You need to surface the videos directly in a Microsoft Power BI dashboard. Which type of tile should you add?

A. video
B. custom streaming data
C. text box
D. web content

Answer: B

Reference:

QUESTION 163

You create a dashboard by using the Microsoft Power BI Service. The dashboard contains a card visual that shows total sales from the current year.

You grant users access to the dashboard by using the Viewer role on the workspace.

A user wants to receive daily notifications of the number shown on the card visual.

You need to automate the notifications.

What should you do?

A. Create a data alert.
B. Share the dashboard to the user.
C. Create a subscription.
D. Tag the user in a comment.

Answer: C

Reference:

QUESTION 164

You have a line chart that shows the number of employees in a department over time.

You need to see the total salary costs of the employees when you hover over a data point.

What are two possible ways to achieve this goal?

A. Add a salary to the tooltips.
B. Add a salary to the visual filters.
C. Add salary to the drillthrough fields.

Answer: A

Reference:

QUESTION 165

You have a report that contains a bar chart and a column chart. The bar chart shows customer count by customer segment. The column chart shows sales by month.

You need to ensure that when a segment is selected in the bar chart, you see which portion of the total sales for the month belongs to the customer segment.

How should the visual interactions be set on the column chart when the bar chart is selected?

A. no impact
B. highlight
C. filter

Answer: B

Reference:

QUESTION 166

You build a report to help the sales team understand its performance and the drivers of sales.

The team needs to have a single visualization to identify which factors affect success.

Which type of visualization should you use?

A. Line and clustered column chart
B. Key influencers
C. Q&A
D. Funnel chart

Answer: B

Reference:

QUESTION 167

You have a dataset named Pens that contains the following columns:

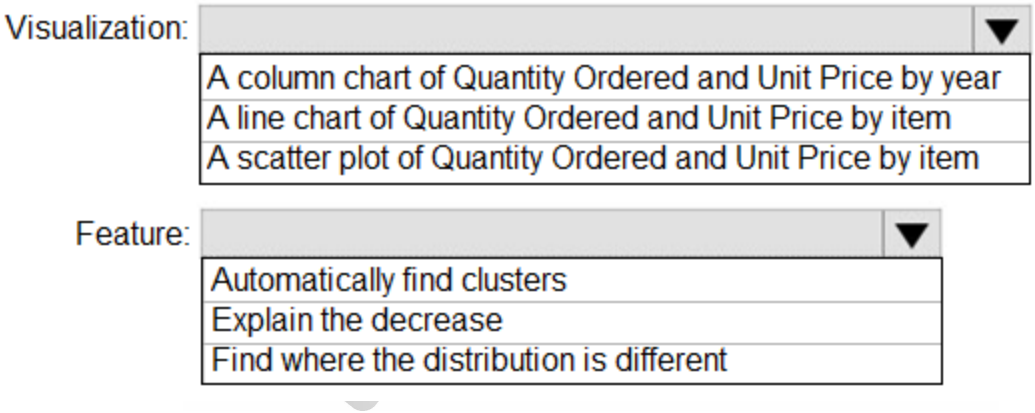
- Unit Price

- Quantity Ordered

You need to create a visualization that shows the relationship between Unit Price and Quantity Ordered. The solution must highlight orders that have a similar unit price and ordered quantity.

Which type of visualization and which feature should you use?

Answer Area



Answer:

Box 1: A scatter plot.

Box 2: Automatically find clusters

Reference:

QUESTION 168

You have a table that contains sales data and approximately 1,000 rows.

You need to identify outliers in the table.

Which type of visualization should you use?

A. donut chart
B. pie chart
C. area chart
D. scatter plot

Answer: D

Reference:

QUESTION 169

You need to create a visualization that compares revenue and cost over time.

Which type of visualization should you use?

A. stacked area chart
B. donut chart
C. line chart
D. waterfall chart

Answer: C

Reference:

QUESTION 170

You have a collection of reports for the HR department of your company.

You need to create a visualization for the HR department that shows a historic employee counts and predicts trends during the next six months.

Which type of visualization should you use?

A. key influencers
B. ribbon chart
C. line chart
D. scatter chart

Answer: C

Reference:

QUESTION 171

You are developing a sales report that will have multiple pages. Each page will answer a different business question.

You plan to have a menu page that will show all the business questions.

You need to ensure that users can click each business question and be directed to the page where the question is answered. The solution must ensure that the menu page will work when deployed to any workspace.

What should you include on the menu page?

A. Create a text box for each business question and insert a link.
B. Create a button for each business question and set the action type to Bookmark.
C. Create a Power Apps visual that contains a drop-down list. The drop-down list will contain the business questions.

Answer: B

Reference:

QUESTION 172

Which of the following is a common use case for scatter charts?

A. Show changes in values over time
B. Show patterns in large sets of data

C. Show comparisons across categories

D. All of the above

Answer: B

Reference:

QUESTION 173

On which of the following chart types can you add a forecast based on a specific number of periods?

A. Scatter charts

B. Line charts

C. Clustered column charts

D. All of the above

Answer: B

Reference:

QUESTION 174

The Q&A visual lets you explore data "in your own words" using what?

A. DAX

B. M Code

C. Natural language queries

D. SQL

Answer: C

Reference:

QUESTION 175

Which of the following filter options applies only to the specific visual in which it is defined?

A. Visual level

B. Page level
C. Report level
D. Drill through

Answer: A

Reference:

QUESTION 176

Which filter setting would you use if you wanted to return the top 3 categories by total profit?

A. Basic
B. Advanced
C. Top N
D. Dynamic

Answer: C

Reference:

QUESTION 177

What object could you add to a dashboard if the user would like an interactive way to sort and filter the data using dates?

A. Categorical Slicer
B. Date Slicer
C. Top N Filter
D. Report Level Filter

Answer: B

Reference:

QUESTION 178

What visual could you use if you wanted to understand the factors that drive a specific metric?

A. Decomposition Tree
B. Line Chart
C. Key Influencers
D. Treemap

Answer: C

Reference:

QUESTION 179

Which visual allows you to break down a measure across multiple dimensions?

A. Decomposition Tree
B. Line Chart
C. Key Influencers
D. Treemap

Answer: A

Reference:

QUESTION 180

Which of the following filter options applies to all visuals across all pages of the report?

A. Visual level
B. Page level
C. Report level
D. Drill through

Answer: C

Reference: