- **Vendor:** Microsoft
- **Exam Code:** DA-100
- **Exam Name:** Analyzing Data with Microsoft Power BI
- **New Updated Questions from Braindump2go**
- **(Updated in December/2021)**

QUESTION 66
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
Explanation:
https://docs.microsoft.com/en-us/power-bi/service-custom-visuals-getting-started-with-developer-tools

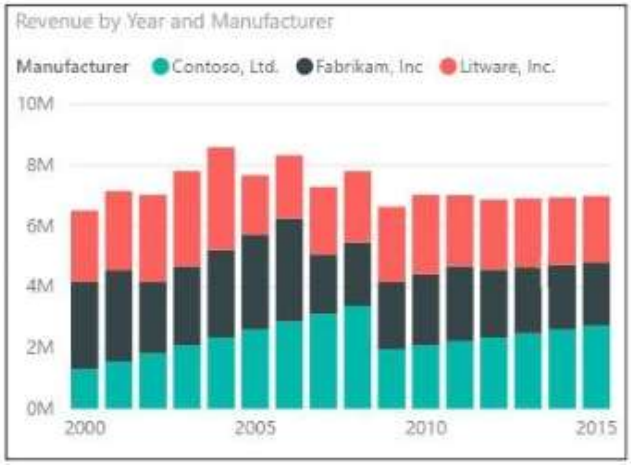
QUESTION 67
You have a Power BI report that is configured to use row-level security (RLS).
You have the following roles:
- A manager role that limits managers to see only the sales data from the stores they manage
- A region role that limits users to see only the data from their respective region

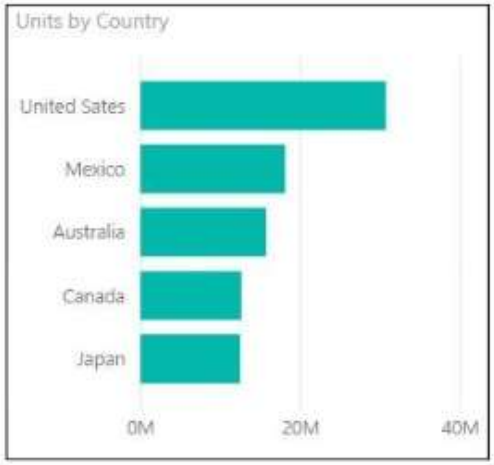
You plan to use Power BI Embedded to embed the report into an application. The application will authenticate the users.
You need to ensure that RLS is enforced when accessing the embedded report.
What should you do?

A. From dev.powerbi.com/apps, register the new application and enable the Read All Reports API access.
B. In the access token for the application, include the user name and the role name.
C. From dev.powerbi.com/apps, register the new application and enable the Read All Groups API access.
D. In the access token for the application, include the report URL and the Microsoft Azure Active Directory domain name.

Answer: B

QUESTION 68
You are creating a report in Power BI Desktop that has two visualizations on a page as shown in the following exhibit.





You need to ensure that when you click the bar of a country, only the values for that country are shown on the Revenue by Year and Manufacturer chart.

A. Click the Revenue by Year and Manufacturer chart. On the Format tab, click Edit Interactions. On the Units by Country chart, click Filter.
B. Click the Revenue by Year and Manufacturer chart. On the Format tab, click Edit Interactions. On the Units by Country chart, click Highlight.
C. Click the Units by Country chart. On the Format tab, click Edit Interactions. On the Revenue by Year and Manufacturer chart, click Filter.
D. Click the Units by Country chart. On the Format tab, click Edit Interactions. On the Revenue by Year and Manufacturer chart, click Highlight.

Answer: C
Explanation:
https://docs.microsoft.com/en-us/power-bi/service-reports-visual-interactions

QUESTION 69
Your company has a security policy stating that proprietary data must not be transferred over the Internet.
During a security audit, auditors discover that executives use the Power BI service for reporting.
You need to recommend a solution to ensure that the company adheres to the security policy.
What should you include in the recommendation?

A. Microsoft SQL Server column encryption
B. Microsoft Azure ExpressRoute
C. a site-to-site VPN to Microsoft Azure
D. the on-premises gateway for Power BI

Answer: B
Explanation:
https://docs.microsoft.com/en-us/power-bi/service-admin-power-bi-expressroute

QUESTION 70
You have a Power BI Desktop project that uses DirectQuery to access an on-premises Microsoft SQL Server database.
From Power BI Desktop, you can query the database.
When you publish the Power BI Desktop project to the Power BI service, the visualizations cannot display the data.
What should you do to resolve the issue?

A. Locate the published dataset for the project in the Power BI service and configure the data source credentials.
B. Install the on-premises data gateway (personal mode) and republish the project.
C. Install the on-premises data gateway and configure a data source.

D. Configure a Microsoft Azure ExpressRoute connection between the on-premises network and the Power BI service.

Answer: C
Explanation:
https://docs.microsoft.com/en-us/power-bi/service-gateway-sql-tutorial

QUESTION 71
Note: This question is part of a series of questions that use the same scenario. For your convenience, the scenario is repeated in each question. Each question presents a different goal and answer choices, but the text of the scenario is the same in each question in this series.
You have a Microsoft SQL Server database that contains the following tables.

Table name	Column name	Data type
Order	Order_ID	Integer
	Order_date	Integer
	Order_amount	Currency
	Customer_ID	Integer
	Order_ship_date	Integer
	Store_ID	Integer
Customer	Customer_ID	Integer
	First_name	Varchar(100)
	Last_name	Varchar(100)
	Customer_photo	Binary
Date	Date_ID	Integer
	Date_name	Datetime
	Month	Integer
	Week	Integer
	Year	Integer
Monthly_returns	Month_ID	Integer
	Total_returns	Float
	Store_ID	Varchar(100)
Store	Store_ID	Integer
	Name	Varchar(100)
	City	Varchar(100)
	Sales_target	Float

The following columns contain date information:
- Date[Month] in the mmyyyy format
- Date[Date_ID] in the ddmmyyyy format
- Date[Date_name] in the mm/dd/yyyy format
- Monthly_returns[Month_ID] in the mmyyyy format

The Order table contains more than one million rows.
The Store table has a relationship to the Monthly_returns table on the Store_ID column. This is the only relationship between the tables.
You plan to use Power BI Desktop to create an analytics solution for the data.
You need to create a chart that displays a sum of Order[Order_amount] by month for the Order_ship_date column and the Order_date column.
How should you model the data?

A. Create a one-to-many relationship from Date[Date_ID] to Order[Order_date] and another relationship from Date[Date_ID] to Monthly_returns[Date_ID].
B. Add a second Date table named Ship_date to the model. Create a many-to-many relationship from Date[Date_ID] to Order[Order_date] and many-to-many relationship from Ship_date[Date_ID] to Order [Order_ship_date].
C. Add a second Date table named Ship_date to the model. Create a one-to-many relationship from Date [Date_ID] to Order[Order_date] and a one-to-many relationship from Ship_Date[Date_ID] to

Order [Order_ship_date].

D. Create a one-to-many relationship from Date[Date_ID] to Order[Order_date] and another relationship from Date[Date_ID] to Order[Order_ship_date].

Answer: C

QUESTION 72

Note: This question is part of a series of questions that use the same scenario. For your convenience, the scenario is repeated in each question. Each question presents a different goal and answer choices, but the text of the scenario is the same in each question in this series.

You have a Microsoft SQL Server database that contains the following tables.

Table name	Column name	Data type
Order	Order_ID	Integer
	Order_date	Integer
	Order_amount	Currency
	Customer_ID	Integer
	Order_ship_date	Integer
	Store_ID	Integer
Customer	Customer_ID	Integer
	First_name	Varchar(100)
	Last_name	Varchar(100)
	Customer_photo	Binary
Date	Date_ID	Integer
	Date_name	Datetime
	Month	Integer
	Week	Integer
	Year	Integer
Monthly_returns	Month_ID	Integer
	Total_returns	Float
	Store_ID	Varchar(100)
Store	Store_ID	Integer
	Name	Varchar(100)
	City	Varchar(100)
	Sales_target	Float

The following columns contain date information:

```
- Date[Month] in the mmyyyy format
- Date[Date_ID] in the ddmmyyyy format
- Date[Date_name] in the mm/dd/yyyy format
- Monthly_returns[Month_ID] in the mmyyyy format
```

The Order table contains more than one million rows.

The Store table has a relationship to the Monthly_returns table on the Store_ID column. This is the only relationship between the tables.

You plan to use Power BI Desktop to create an analytics solution for the data.

You are modeling the data in Power BI.

You need to import only a sample of the data from the Order table.

What are two possible ways to achieve the goal? Each correct answer presents a complete solution.

NOTE: Each correct selection is worth one point.

A. From Query Editor, create a custom column that uses a custom column formula.

B. From Query Editor, add a SELECT statement that uses a WHERE clause to the source definition.

C. In the Power BI model, create a calculated table.

D. From Query Editor, filter the table by Order_date.

E. From Query Editor, create a column by using Column From Examples.

Answer: BD

QUESTION 73
Note: This question is part of a series of questions that use the same scenario. For your convenience, the scenario is repeated in each question. Each question presents a different goal and answer choices, but the text of the scenario is the same in each question in this series.
You have a Microsoft SQL Server database that contains the following tables.

Table name	Column name	Data type
Order	Order_ID	Integer
	Order_date	Integer
	Order_amount	Currency
	Customer_ID	Integer
	Order_ship_date	Integer
	Store_ID	Integer
Customer	Customer_ID	Integer
	First_name	Varchar(100)
	Last_name	Varchar(100)
	Customer_photo	Binary
Date	Date_ID	Integer
	Date_name	Datetime
	Month	Integer
	Week	Integer
	Year	Integer
Monthly_returns	Month_ID	Integer
	Total_returns	Float
	Store_ID	Varchar(100)
Store	Store_ID	Integer
	Name	Varchar(100)
	City	Varchar(100)
	Sales_target	Float

The following columns contain date information:
- Date[Month] in the mmyyyy format
- Date[Date_ID] in the ddmmyyyy format
- Date[Date_name] in the mm/dd/yyyy format
- Monthly_returns[Month_ID] in the mmyyyy format

The Order table contains more than one million rows.
The Store table has a relationship to the Monthly_returns table on the Store_ID column. This is the only relationship between the tables.
You plan to use Power BI Desktop to create an analytics solution for the data.
You are modifying the model to report on the number of orders.
You need to calculate the number of orders.
What should you do?

A. Create a calculated measure that uses the COUNTA(Order_ID) DAX formula.
B. Create a calculated column that uses the COUNTA(Order_ID) DAX formula.
C. Create a calculated column that uses the SUM(Order_ID) DAX formula.
D. Create a calculated measure that uses the SUM(Order_ID) DAX formula.

Answer: A

QUESTION 74
Note: This question is part of a series of questions that use the same scenario. For your convenience, the scenario is repeated in each question. Each question presents a different goal and answer choices, but the text of the scenario is the same in each question in this series.
You have a Microsoft SQL Server database that contains the following tables.

Table name	Column name	Data type
Order	Order_ID	Integer
	Order_date	Integer
	Order_amount	Currency
	Customer_ID	Integer
	Order_ship_date	Integer
	Store_ID	Integer
Customer	Customer_ID	Integer
	First_name	Varchar(100)
	Last_name	Varchar(100)
	Customer_photo	Binary
Date	Date_ID	Integer
	Date_name	Datetime
	Month	Integer
	Week	Integer
	Year	Integer
Monthly_returns	Month_ID	Integer
	Total_returns	Float
	Store_ID	Varchar(100)
Store	Store_ID	Integer
	Name	Varchar(100)
	City	Varchar(100)
	Sales_target	Float

The following columns contain date information:
- Date[Month] in the mmyyyy format
- Date[Date_ID] in the ddmmyyyy format
- Date[Date_name] in the mm/dd/yyyy format
- Monthly_returns[Month_ID] in the mmyyyy format

The Order table contains more than one million rows.
The Store table has a relationship to the Monthly_returns table on the Store_ID column. This is the only relationship between the tables.
You plan to use Power BI Desktop to create an analytics solution for the data.
You plan to create a chart that displays total Order[Order_amount] by Store[Name].
You need to modify the model to ensure that you can create the chart.
Which two actions should you perform? Each correct answer presents part of the solution.
NOTE: Each correct selection is worth one point.

A. Create a relationship between the Order table and the Store table.
B. To the Order table, add a measure that uses the COUNTA('Order'[Order_ID]) DAX formula.
C. To the Order table, add a column that uses the RELATED('Store'[Store_ID]) DAX formula.
D. To the Order table, add a measure that uses the COUNT('Order'[Order_amount]) DAX formula.

Answer: AC

QUESTION 75
You plan to create a dashboard in the Power BI service that retrieves data from a Microsoft SQL Server database. The dashboard will be shared between the users in your organization.
You need to ensure that the users will see the current data when they view the dashboard.
How should you configure the connection to the data source?

A. Deploy an on-premises data gateway. Connect to the data by using the Import Data Connectivity mode.
B. Deploy an on-premises data gateway. Connect to the data by using the DirectQuery Data Connectivity mode.
C. Deploy an on-premises data gateway (personal mode). Connect to the data by using the Import

Data Connectivity mode.
D. Deploy an on-premises data gateway (personal mode). Connect to the data by using the DirectQuery Data Connectivity mode.

Answer: B

QUESTION 76
You plan to use Power BI Desktop optimized for Power BI Report Server to create a report. The report will be published to Power BI Report Server.
You need to ensure that all the visualization in the report can be consumed by users.
Which three types of visualizations should you include in the report? Each correct answer presents part of the solution.
NOTE: Each correct selection is worth one point.

A. bubble maps
B. custom visuals
C. R visuals
D. breadcrumbs
E. funnel charts

Answer: ABE
Explanation:
https://docs.microsoft.com/en-us/power-bi/report-server/install-powerbi-desktop

QUESTION 77
You plan to create a dashboard in the Power BI service that will retrieve data from a tabular database in Microsoft SQL Server Analysis Services (SSAS). The dashboard will be shared between the users in your organization.
The Analysis Services database has a DirectQuery connection to the SQL Server database that contains the source data.
You need to ensure that the users will see the current data when they view the dashboard.
How should you configure the connection to the data source?

A. Deploy an on-premises data gateway. Connect to the data by using the Connect live option.
B. Deploy an on-premises data gateway. Connect to the data by using the DirectQuery Data Connectivity mode.
C. Deploy an on-premises data gateway (personal mode). Connect to the data by using the Connect live option.
D. Deploy an on-premises data gateway (personal mode). Connect to the data by using the DirectQuery Data Connectivity mode.

Answer: A

QUESTION 78
You plan to use Power BI Desktop to create a report. The report will consume data from an on-premises tabular database named SalesDB in Microsoft SQL Server Analysis Services (SSAS). The report will be published to the Power BI service.
You need to ensure that the report published to the Power BI service will access the current data in SalesDB.
What should you do?

A. Deploy an on-premises data gateway and configure the connection to SalesDB to use the Connect live option.
B. Deploy an on-premises data gateway and configure the connection to SalesDB to use the Import Data Connectivity mode.
C. Deploy an on-premises data gateway (personal mode) and configure the connection to SalesDB to use the DirectQuery Data Connectivity mode.
D. Deploy an on-premises data gateway and configure the connection to SalesDB to use the DirectQuery Data Connectivity mode.

Answer: A

QUESTION 79
You plan to join a fact table named ActivityLog to a Date dimension named ActivityDate. The date value in ActivityLog is a datetime column named ActivityStart. The date value in ActivityDate is a number column named DateID. DateID is in the YYYYMMDD format.
What should you do in the model before you create the relationship?

A. Change the Data Type of ActivityStart to Date.
B. Create a measure in ActivityLog that uses the FORMAT DAX function.
C. Change the Data Type of DateID to Date.
D. Create a calculated column in ActivityLog that uses the FORMAT DAX function.

Answer: D

QUESTION 80
You have a table in Power BI Desktop as shown in the following exhibit.

	Id	Key	Value
1	1	Student	Tom
2	1	Class	101
3	1	Score	80
4	2	Student	Jane
5	2	Class	101
6	2	Score	89
7	3	Student	Larry
8	3	Class	102
9	3	Score	95
10	3	Score	70

You pivot the columns as shown in the following exhibit.

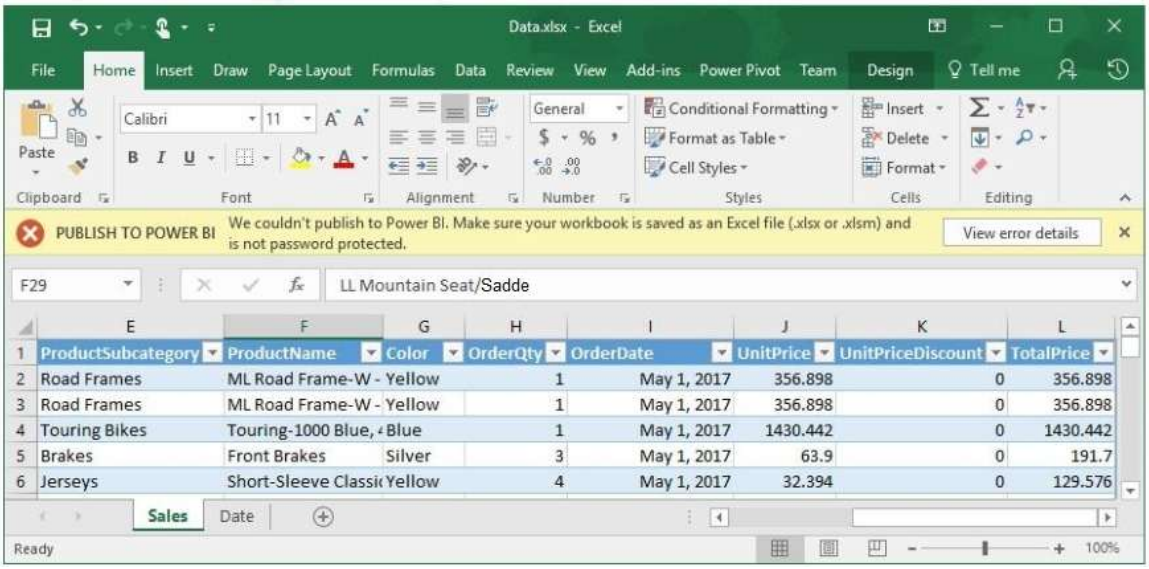
	Id	Student	Class	Score
1	1	Tom	101	80
2	2	Jane	101	89
3	3	Larry	102	Error

You need to resolve the error in row 3. The solution must preserve all the data.
What should you do?

A. Change the Data Type of the Value column.
B. Select the Key column, and then click Remove Duplicates.
C. Change the Aggregate Value Function of the pivot.
D. Select the Score column, and then click Remove Errors.

Answer: C

QUESTION 81
You attempt to publish a Microsoft Excel file to Power BI, and you receive the error message shown in the exhibit. (Click the Exhibit button.)



The file is in c:\data\.
You need to ensure that you can publish the file to Power BI.
What should you do first?

A. Save the file in a Microsoft SharePoint document library.
B. Decrypt the workbook.
C. Add a digital signature to the workbook.
D. Set the file attributes to read-only.

Answer: B
Explanation:
https://docs.microsoft.com/en-us/power-bi/service-publish-from-excel

QUESTION 82
You have two tables named Customer and Orders. A sample of the Data in Customer is shown in the following table.

CustomerID	CustomerName
1	Customer1
2	Customer2
3	Customer3
4	Customer4

A sample of the data in Orders is shown in the following table.

OrderID	CustomerID	OrderDate	OrderAmount
1	1	12-22-2016	1000
2	1	12-23-2016	1200
3	2	12-24-2016	1100
4	3	12-24-2016	800

You need to create the following new table.

CustomerID	CustomerName	OrderID	OrderDate	OrderAmount
1	Customer1	1	12-22-2016	1000
1	Customer1	2	12-23-2016	1200
2	Customer2	3	12-24-2016	1100
3	Customer3	4	12-24-2016	800
4	Customer4			

You must use Customer as the first table.
Which join kind should you use?

A. Right Anti
B. Right Outer
C. Left Anti
D. Left Outer
E. Inner

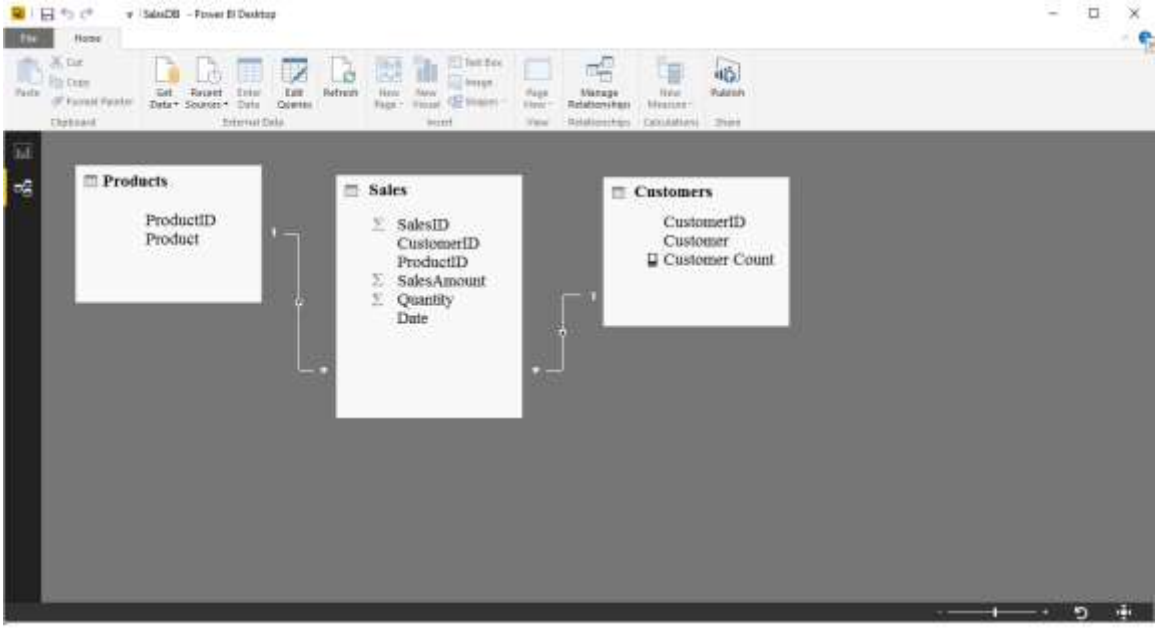
Answer: D

QUESTION 83
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. DATEADD
B. TOTALYTD
C. DATESYTD
D. ENDOFYEAR

Answer: C
Explanation:
https://powerpivotpro.com/2016/01/year-to-date-in-previousprior-year/

QUESTION 84
You have a Power BI Desktop project that has the model shown in the exhibit. (Click the Exhibit tab.)



Customer Count is a measure that uses the CountRows function to calculate the number of customers.
You create a table visualization that displays ProductID, Product, and Customer Count.
When you view the table, you discover that Customer Count always displays the total number of customers instead of the number of customers who purchased the product.
You need to ensure that the table visualization displays the number of customers who purchased each product.
What should you do?

A. Modify the table relationship between the Customers table and the Sales table to use a Cross filter direction of Both.

B. Modify the Customer Count measure to use the COUNT function.
C. Modify the Customer Count measure to use the COUNTX function.
D. Modify the table relationship between the Products table and the Sales table to use a Cross filter direction of Both.

Answer: D
Explanation:
https://docs.microsoft.com/en-us/power-bi/desktop-create-and-manage-relationships

QUESTION 85
You create a dashboard that displays the results of a customer satisfaction survey.
You need to embed a tweet from your company's Twitter feed into the dashboard.
What should you do?

A. Edit the report and import a visualization from the marketplace. Pin the visualization to the dashboard.
B. Edit the report and import a visualization from a file. Pin the visualization to the dashboard.
C. To the dashboard, add a tile that uses a web content source.
D. To the dashboard, add a tile that uses a PubNub content source.

Answer: C
Explanation:
https://docs.microsoft.com/en-us/power-bi/service-dashboard-add-widget

QUESTION 86
Note: This question is part of a series of questions that use the same scenario. For your convenience, the scenario is repeated in each question. Each question presents a different goal and answer choices, but the text of the scenario is the same in each question in this series.
You have a Microsoft SQL Server database that contains the following tables.

Table name	Column name	Data type
Order	Order_ID	Integer
	Order_date	Integer
	Order_amount	Currency
	Customer_ID	Integer
	Order_ship_date	Integer
	Store_ID	Integer
Customer	Customer_ID	Integer
	First_name	Varchar(100)
	Last_name	Varchar(100)
	Customer_photo	Binary
Date	Date_ID	Integer
	Date_name	Datetime
	Month	Integer
	Week	Integer
	Year	Integer
Monthly_returns	Month_ID	Integer
	Total_returns	Float
	Store_ID	Varchar(100)
Store	Store_ID	Integer
	Name	Varchar(100)
	City	Varchar(100)
	Sales_target	Float

The following columns contain date information:
- Date[Month] in the mmyyyy format
- Date[Date_ID] in the ddmmyyyy format
- Date[Date_name] in the mm/dd/yyyy format
- Monthly_returns[Month_ID] in the mmyyyy format

The Order table contains more than one million rows.
The Store table has a relationship to the Monthly_returns table on the Store_ID column. This is the only relationship between the tables.
You plan to use Power BI Desktop to create an analytics solution for the data.
You need to create a relationship between the Monthly_returns table and Date[Date_ID].
What should you do before you create the relationship?

A. In the Date table, create a new calculated column named Month_ID that uses the yyyydd format.
B. In the Monthly_returns table, create a new calculated column named Date_ID that uses the ddmmyyyy format.
C. To the Order table, add a calculated column that uses the RELATED(Monthly_returns[Month_ID]) DAX formula.
D. To the Date table, add a calculated column that uses the RELATED(Monthly_returns[Month_ID]) DAX formula.

Answer: B
Explanation:
https://docs.microsoft.com/en-us/power-bi/desktop-create-and-manage-relationships

QUESTION 87
Note: This question is part of a series of questions that use the same scenario. For your convenience, the

scenario is repeated in each question. Each question presents a different goal and answer choices, but the text of the scenario is the same in each question in this series.

You have a Microsoft SQL Server database that contains the following tables.

Table name	Column name	Data type
Order	Order_ID	Integer
	Order_date	Integer
	Order_amount	Currency
	Customer_ID	Integer
	Order_ship_date	Integer
	Store_ID	Integer
Customer	Customer_ID	Integer
	First_name	Varchar(100)
	Last_name	Varchar(100)
	Customer_photo	Binary
Date	Date_ID	Integer
	Date_name	Datetime
	Month	Integer
	Week	Integer
	Year	Integer
Monthly_returns	Month_ID	Integer
	Total_returns	Float
	Store_ID	Varchar(100)
Store	Store_ID	Integer
	Name	Varchar(100)
	City	Varchar(100)
	Sales_target	Float

The following columns contain date information:
- Date[Month] in the mmyyyy format
- Date[Date_ID] in the ddmmyyyy format
- Date[Date_name] in the mm/dd/yyyy format
- Monthly_returns[Month_ID] in the mmyyyy format

The Order table contains more than one million rows.
The Store table has a relationship to the Monthly_returns table on the Store_ID column. This is the only relationship between the tables.
You plan to use Power BI Desktop to create an analytics solution for the data.
You need to create a relationship between the Order table and the Store table on the Store_ID column.
What should you do before you create the relationship?

A. In the Order table query, use the Table.TrasformRows function.
B. In the Store table query, use the Table.TrasformRows function.
C. In the Store table query, use the Table.TrasformColumnTypes function.
D. In the Order table query, use the Table.TrasformColumnTypes function.

Answer: C

QUESTION 88
Note: This question is part of a series of questions that present the same scenario. Each question in the series contains a unique solution that might meet the stated goals. Some question sets might have more than one correct solution, while others might not have a correct solution.

After you answer a question in this section, you will NOT be able to return to it. As a result, these questions will not appear in the review screen.

You have a user named User1. User1 is a member of a security group named Contoso PowerBI.
User1 has access to a workspace named Contoso Workspace.
You need to prevent User1 from exporting data from the visualizations in Contoso Workspace.
Solution: From the Power BI Admin portal, you modify the Tenant settings.
Does this meet the goal?

A. Yes
B. No

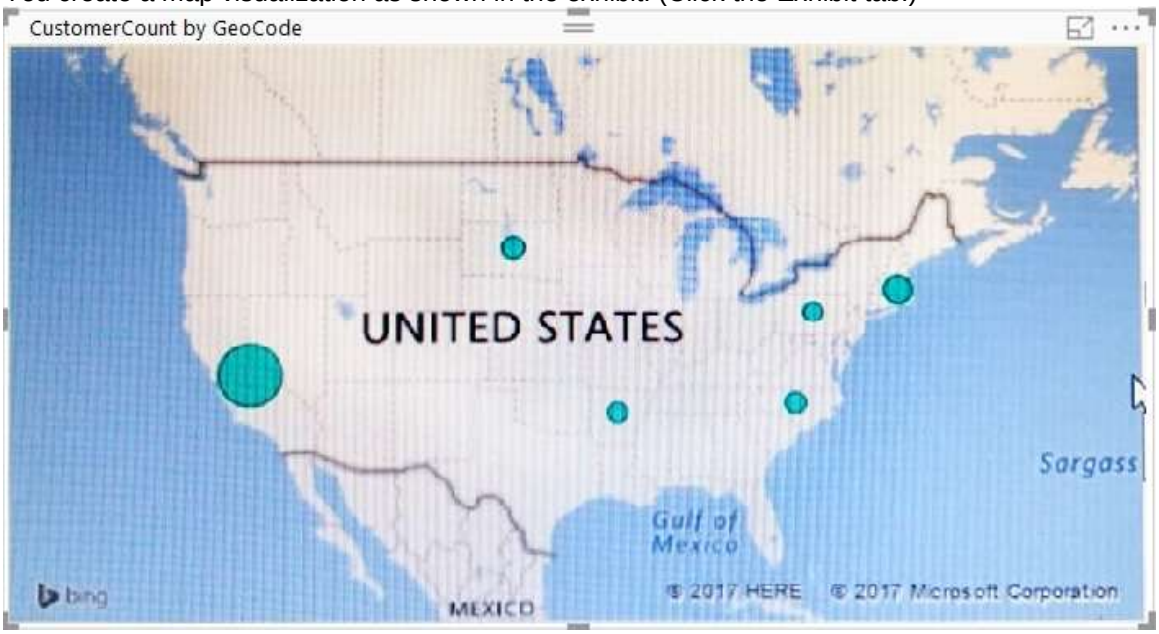
Answer: B

QUESTION 89

You have the following table named Location.

GeoCode	CustomerCount
CA	9530
AR	540
MA	2300
SD	1200
PA	340
NC	890

The GeoCode column represents the country where each customer is located.
You create a map visualization as shown in the exhibit. (Click the Exhibit tab.)



You need to ensure that the map displays the country locations.
What should you do?

A. Replace the values in the GeoCode column with postal codes or zip codes.
B. Change the name of the GeoCode column to Country.
C. Change the name of the Location table to Country.

D. Change the Default Summarization of the GeoCode column.
E. Add a Geoportal column to the Location table.
F. Change the Data Type of the GeoCode column.

Answer: B
Explanation:
https://docs.microsoft.com/en-us/power-bi/visuals/power-bi-map-tips-and-tricks

QUESTION 90
Case Study 2 - Contoso Ltd
Overview
Existing Environment
Contoso, Ltd. is a manufacturing company that produces outdoor equipment Contoso has quarterly board meetings for which financial analysts manually prepare Microsoft Excel reports, including profit and loss statements for each of the company's four business units, a company balance sheet, and net income projections for the next quarter.
Data and Sources
Data for the reports comes from three sources. Detailed revenue, cost and expense data comes from an Azure SQL database. Summary balance sheet data comes from Microsoft Dynamics 365 Business Central. The balance sheet data is not related to the profit and loss results, other than they both relate to dates.
Monthly revenue and expense projections for the next quarter come from a Microsoft SharePoint Online list. Quarterly projections relate to the profit and loss results by using the following shared dimensions: date, business unit, department, and product category.
Net Income Projection Data
Net income projection data is stored in a SharePoint Online list named Projections in the format shown in the following table.

MonthStartDate	Projection type	ProductCategory	Department	Projection
1-Apr-20	Revenue	Bikes	N/A	200,000
1-Apr-20	Revenue	Components	N/A	250,000
1-Apr-20	Revenue	Clothing	N/A	300,000
1-Apr-20	Revenue	Accessories	N/A	150,000
1-May-20	Revenue	Bikes	N/A	200,000
1-May-20	Revenue	Components	N/A	250,000
1-Apr-20	Expense	Bikes	Bike Manufacture	50,000
1-Apr-20	Expense	Bikes	Bike Sales	3,333

Revenue projections are set at the monthly level and summed to show projections for the quarter.
Balance Sheet Data
The balance sheet data is imported with final balances for each account per month in the format shown in the following table.

AccountCategory	Account	Month	Year	BalanceAmount
Current assets	Cash and cash equivalents	3	2020	20,289
Current assets	Inventories	3	2020	4,855
Long-term liabilities	Long-term debt	3	2020	50,207
Current assets	Cash and cash equivalents	2	2020	28,209
Current assets	Inventories	2	2020	5,845
Long-tern liabilities	Long-tern debt	2	2020	49,887
Current assets	Cash and cash equivalents	1	2020	25,567
Current assets	Inventories	1	2020	65,998
Long-term liabilities	Long-term debt	1	2020	46,124

There is always a row for each account for each month in the balance sheet data.
Dynamics 365 Business Central Data

Business Central contains a product catalog that shows how products roll up to product categories, which roll up to business units. Revenue data is provided at the date and product level. Expense data is provided at the date and department level.

Business Issues

Historically, it has taken two analysts a week to prepare the reports for the quarterly board meetings. Also, there is usually at least one issue each quarter where a value in a report is wrong because of a bad cell reference in an Excel formula. On occasion, there are conflicting results in the reports because the products and departments that roll up to each business unit are not defined consistently.

Planned Changes

Contoso plans to automate and standardize the quarterly reporting process by using Microsoft Power Bl. The company wants to how long it takes to populate reports to less than two days. The company wants to create common logic for business units, products, and departments to be used across all reports, including, but not limited, to the quarterly reporting for the board.

Technical Requirements

Contoso wants the reports and datasets refreshed with minimal manual effort The company wants to provide a single package of reports to the board that contains custom navigation and links to supplementary information. Maintenance, including manually updating data and access, must be minimized as much as possible.

Security Requirements

The reports must be made available to the board from powerbi.com. A mail-enabled security group will be used to share information with the board.

The analysts responsible for each business unit must see all the data the board sees, except the profit and loss data, which must be restricted to only their business unit's data. The analysts must be able to build new reports from the dataset that contains the profit and loss data, but any reports that the analysts build must not be included in the quarterly reports for the board. The analysts must not be able to share the quarterly reports with anyone.

Report Requirements

You plan to relate the balance sheet to a standard date table in Power Bl in a many-to-one relationship based on the last day of the month. At least one of the balance sheet reports in the quarterly reporting package must show the ending balances for the quarter, as well as for the previous quarter.

Projections must contain a column named RevenueProjection that contains the revenue projection amounts. A relationship must be created from Projections to a table named Date that contains the columns shown in the following table.

Name	Data type	Example
Date	Date	4-Apr-2020
Month	Integer	20,2004
Month Name	Text	February
Quarter	Integer	20,202
Year	Integer	2,020

The relationships between products and departments to business units must be consistent across all reports.

The board must be able to get the following information from the quarterly reports:

- Revenue trends over time
- Ending balances for each account
- A comparison of expenses versus projections by quarter
- Changes in long-term liabilities from the previous quarter
- A comparison of quarterly revenue versus the same quarter during the prior year

What is the minimum number of datasets and storage modes required to support the reports?

A. two imported datasets
B. a single DirectQuery dataset
C. two DirectQuery datasets
D. a single imported dataset

Answer: A

Explanation:

Scenario: Data and Sources

Data for the reports comes from three sources. Detailed revenue, cost, and expense data comes from an Azure SQL database. Summary balance sheet data comes from Microsoft Dynamics 365 Business Central. The balance sheet data is not related to the profit and loss results, other than they both relate dates.

Monthly revenue and expense projections for the next quarter come from a Microsoft SharePoint Online list. Quarterly projections relate to the profit and loss results by using the following shared dimensions:
date, business unit, department, and product category.
Reference:
https://docs.microsoft.com/en-us/power-bi/connect-data/service-datasets-understand