

DUMPSGATE

Microsoft

PL-300 Exam

Power BI Data Analyst Associate

Questions & Answers

(Full Version)

Thank you for Purchasing PL-300 Exam

Version: 4.0

Topic 1, Litware, Inc. Case Study

This is a case study. Case studies are not timed separately. You can use as much exam time as you would like to complete each case. However, there may be additional case studies and sections on this exam. You must manage your time to ensure that you are able to complete all questions included on this exam in the time provided.

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Overview

Litware, Inc. is an online retailer that uses Microsoft Power BI dashboards and reports. The company plans to leverage data from Microsoft SQL Server databases, Microsoft Excel files, text files, and several other data sources.

Litware uses Azure Active Directory (Azure AD) to authenticate users.

- Existing

Environment Sales

Data

Litware has online sales data that has the SQL schema shown in the following table.

Table name	Column name	Data type
Sales_Region	region_id	Integer
	name	Varchar
Region_Manager	region_id	Integer
	manager_id	Integer
Sales_Manager	sales_manager_id	Integer
	name	Varchar
	username	Varchar
Sales	sales_id	Integer
	sales_date_id	Integer
	sales_amount	Floating
	customer_id	Integer
	sales_ship_date_id	Integer
	region_id	Varchar
Customer_Date	customer_id	Integer
	first_name	Varchar
	last_name	Varchar
Date	date_id	Integer
	date	Date
	month	Integer
	week	Integer
	year	Integer
Weekly_Returns	week_id	Integer
	total_returns	Floating
	sales_region_id	Varchar
Targets	target_id	Integer
	sales_target	Decimal
	date_id	Integer
	region_id	Integer

In the Date table, the dateid column has a format of yyyyymmdd and the month column has a format of yyymm. The week column in the Date table and the weekid column in the Weekly_Returns table have a format of yyyyww. The regionid column can be managed by only one sales manager.

Data Concerns

You are concerned with the quality and completeness of the sales data. You plan to verify the sales data for negative sales amounts.

Reporting Requirements

Litware identifies the following technical requirements:

- Executives require a visual that shows sales by region.
- Regional managers require a visual to analyze weekly sales and returns.
- Sales managers must be able to see the sales data of their respective region only.
- The sales managers require a visual to analyze sales performance versus sales targets.
- The sale department requires reports that contain the number of sales transactions.
- Users must be able to see the month in reports as shown in the following example: Feb 2020.
- The customer service department requires a visual that can be filtered by both sales month and ship month independently.

Question: 1

You need to address the data concerns before creating the data model. What should you do in Power Query Editor?

- A. Select Column distribution.
- B. Select the sales_amount column and apply a number filter.
- C. Select Column profile, and then select the sales_amount column.
- D. Transform the sales_amount column to replace negative values with 0.

Answer: C

Explanation:

Question: 2

You need to create a calculated column to display the month based on the reporting requirements. Which DAX expression should you use?

- A. FORMAT('Date'[date], "MMM YYYY")
- B. FORMAT('Date' [date], "M YY")
- C. FORMAT('Date'[date_id], "MMM") & "" & FORMAT('Date'[year], "#")
- D. FORMAT('Date' [date_id], "MMM YYYY")

Answer: A

Explanation:

Question: 3

You need to create the required relationship for the executive's visual. What should you do before you can create the relationship?

- A. Change the data type of Sales[region_id] to Whole Number.
- B. In the Sales table, add a measure for sum(sales_amount).
- C. Change the data type of sales[sales_id] to Text.
- D. Change the data type of sales [region_id] to Decimal Number.

Answer: A

Explanation:

Scenario: Executives require a visual that shows sales by region.

Need to change the sales_id column from Varchar to Whole Number (Integer).

Question: 4

What should you create to meet the reporting requirements of the sales department?

- A. a measure that uses a formula of SUM (Sales [sales_id])
- B. a calculated column that use a formula of COUNTA(sales [sales_id])
- C. a measure that uses a formula of COUNTROWS (Sales)
- D. a calculated column that uses a formula of SUM (Sales [sales_id])

Answer: C

Explanation:

The sale department requires reports that contain the number of sales transactions.

The COUNTROWS function counts the number of rows in the specified table, or in a table defined by an expression.

Reference:

<https://docs.microsoft.com/en-us/dax/countrows-function-dax>

Question: 5

You need to create a relationship between the Weekly_Retuns table and the Date table to meet the reporting requirements of the regional managers. What should you do?

- A. In the Weekly.Returns table, create a new calculated column named date-id in a format of yyymmdd and use the calculated column to create a relationship to the Date table.
- B. Add the Weekly_Returns data to the Sales table by using related DAX functions.
- C. Create a new table based on the Date table where date-id is unique, and then create a many-to- many relationship to Weekly_Return.

Answer: A

Explanation:

Scenario: Region managers require a visual to analyze weekly sales and

returns. To relate the two tables we need a common column.

Question: 6

HOTSPOT

You need to create a visualization to meet the reporting requirements of the sales managers. How should you create the visualization? To answer, select the appropriate options in the answer area.

NOTE: Each correct selection is worth one point.

Visualization type:

- Card
- Donut chart
- Gauge
- Key influencers
- KPI

Indicator:

- Date[month]
- Sales[sales_amount]
- Sales[sales_id]
- Targets[sales_target]
- Weekly_Returns[total_returns]

These are the selections for Indicator

Trend axis:

- Date[month]
- Sales[sales_amount]
- Sales[sales_id]
- Targets[sales_target]
- Weekly_Returns[total_returns]

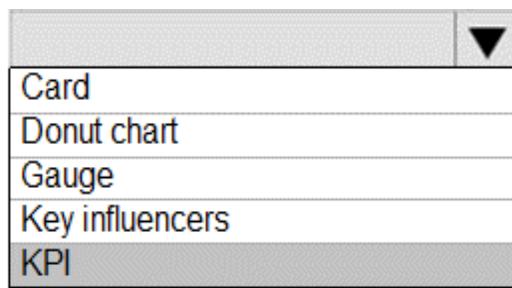
Target goals:

- Date[month]
- Sales[sales_amount]
- Sales[sales_id]
- Targets[sales_target]
- Weekly_Returns[total_returns]

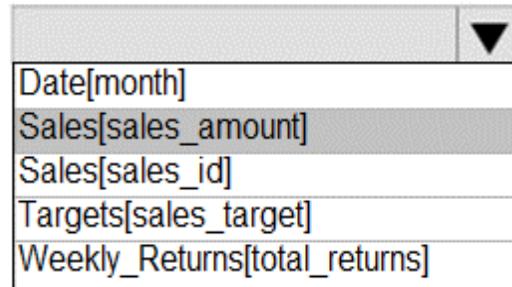
Explanation:

Answer:

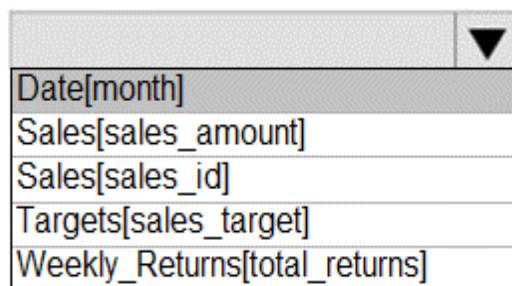
Visualization type:



Indicator:



Trend axis:



Target goals:



Scenario: The sales managers require a visual to analyze sales performance versus sales targets.

Box 1: KPI

A Key Performance Indicator (KPI) is a visual cue that communicates the amount of progress made toward a measurable goal.

Box 2: Sales[sales_amount]

Box 3: Date[month]

Time > FiscalMonth. This value will represent the

trend. Box 4: Targets[sales_target]

Reference:

<https://docs.microsoft.com/en-us/power-bi/visuals/power-bi-visualization-kpi>

Question: 7

You need to provide a solution to provide the sales managers with the required access. What should you include in the solution?

- A. Create a security role that has a table filter on the Sales_Manager table where username = UserName()
- B. Create a security role that has a table filter on the Region_Manager table where sales_manager_id = UserPrincipalName().
- C. Create a security role that has a table filter on the Sales_Manager table where name = UserName().
- D. Create a security role that has a table filter on the Sales_Manager table where username = sales_manager_id.

Answer: A

Explanation:

<https://powerbi.microsoft.com/en-us/blog/using-username-in-dax-with-row-level-security/>

Question: 8

You need to create relationships to meet the reporting requirements of the customer service department.

What should you create?

- A. an additional date table named ShipDate, a one-to-many relationship from Sales[sales_date_id] to Date[date_id], and a one-to-many relationship from Sales[sales_ship_date_id] to ShipDate[date_id]
- B. an additional date table named ShipDate, a many-to-many relationship from Sales[sales_date_id] to Date[date_id], and a many-to-many relationship from Sales[sales_ship_date_id] to ShipDate[date_id]
- C. a one-to-many relationship from Date[date_id] to Sales[sales_date_id] and another one-to-many relationship from Date[date_id] to Weekly_Returns[week_id]
- D. a one-to-many relationship from Sales[sales_date_id] to Date[date_id] and a one-to-many relationship from Sales[sales_ship_date_id] to Date[date_id]
- E. a one-to-many relationship from Date[date_id] to Sales[sales_date_id] and another one-to-many relationship from Date[date_id] to Sales[sales_ship_date_id]

Answer: A

Explanation:

Scenario: The customer service department requires a visual that can be filtered by both sales month and ship month independently.

Reference:

<https://docs.microsoft.com/en-us/power-bi/transform-model/desktop-relationships-understand>

Topic 2, Contoso Ltd, Case Study

Overview

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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-term liabilities	Long-term 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 BI. 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 BI 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

Question: 9

DRAG DROP

You need to create a DAX measure in the data model that only allows users to see projections at the appropriate levels of granularity.

How should you complete the measure? To answer, drag the appropriate values to the correct targets. Each value may be used once, more than once, or not at all. You may need to drag the split bar between panes or scroll to view content.

NOTE: Each correct selection is worth one point.

Values	Answer Area
<input type="text" value="AND"/>	Total Projected Revenue =
<input type="text" value="IF"/>	<input type="text" value="Value"/> (
<input type="text" value="ISFILTERED"/>	NOT (<input type="text" value="Value"/> ('Date'[Date])),
<input type="text" value="KEEPFILTERS"/>	<input type="text" value="Value"/> (Projection[Revenue Projection])
<input type="text" value="SUM"/>)
<input type="text" value="SUMX"/>	

Answer:

Explanation:

Total Projected Revenue =

```
IF  (
    NOT (  ( 'Date' [Date] ) ),
    SUM 
)
```

Scenario: Revenue projections are set at the monthly level and summed to show projections for the quarter.

Box 1: IF

Box 2: ISFILTERED

ISFILTERED returns TRUE when columnName is being filtered directly. If there is no filter on the column or if the filtering happens because a different column in the same table or in a related table is being filtered then the function returns FALSE.

Box 3: SUM

Reference:

<https://docs.microsoft.com/en-us/dax/isfiltered-function-dax>

Question: 10

HOTSPOT

You need to calculate the last day of the month in the balance sheet data to ensure that you can relate the balance sheet data to the Date table. Which type of calculation and which formula should you use? To answer, select the appropriate options in the answer area.

a. NOTE: Each correct selection is worth one point.

Answer Area

Type of calculation:

- A DAX calculated column
- A DAX calculated measure
- An M custom column

Formula:

```
Date.EndOfMonth(#date([Year], [Month], 1))
Date.EndOfQuarter(#date([Year], [Month], 1))
ENDOFQUARTER(DATE('BalanceSheet'[Year], BalanceSheet[Month], 1), 0)
```

Answer:

Explanation:

Type of calculation:

- A DAX calculated column
- A DAX calculated measure
- An M custom column

Formula:

```
Date.EndOfMonth(#date([Year], [Month], 1))
Date.EndOfQuarter(#date([Year], [Month], 1))
ENDOFQUARTER(DATE('BalanceSheet'[Year], BalanceSheet[Month], 1), 0)
```

Box 1: A DAX Calculated measure

Box 2: Date.EndofQuarter(#date([Year],[Mont],1))

ENDOFQUARTER returns the last date of the quarter in the current context for the specified column of dates.

The following sample formula creates a measure that returns the end of the quarter, for the current context.

```
= ENDOFQUARTER(DateTime[DateKey])
```

Reference:

<https://docs.microsoft.com/en-us/dax/endofquarter-function-dax>

Question: 11

HOTSPOT

You need to grant access to the business unit analysts.

What should you configure? To answer, select the appropriate options in the answer area. NOTE: Each correct selection is worth one point.

Answer Area

Permissions required in powerbi.com:

Access permissions to an app
The Member role to the workspace
The Viewer role to the workspace

Permissions for the profit and loss dataset:

Build
Delete
Reshare

Answer:

Explanation:

Permissions required in powerbi.com:

Access permissions to an app
The Member role to the workspace
The Viewer role to the workspace

Permissions for the profit and loss dataset:

Build
Delete
Reshare

Box 1: The Viewer role to the workspace

The Viewer role gives a read-only experience to its users. They can view dashboards, reports, or workbooks in the workspace, but can't browse the datasets or dataflows. Use the Viewer role wherever you would previously use a classic workspace set to "Members can only view Power BI content".

Capability	Admin	Member	Contributor	Viewer
Update and delete the workspace.	X			
Add/remove people, including other admins.	X			
Add members or others with lower permissions.	X	X		
Publish and update an app.	X	X		
Share an item or share an app.	X	X		
Allow others to reshare items.	X	X		
Create, edit, and delete content in the workspace.	X	X	X	
Publish reports to the workspace, delete content.	X	X	X	
View an item.	X	X	X	X
Create a report in another workspace based on a dataset in this workspace.	X	X	X	X ¹
Copy a report.	X	X	X	X ¹

Box 2: Build

The analysts must be able to build new reports from the dataset that contains the profit and loss data.

Scenario: The reports must be made available to the board from powerbi.com. 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. a. 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.

Reference:

<https://www.nickyvv.com/2019/08/the-new-power-bi-workspace-viewer-role-explained.html>

Question: 12

You need to recommend a strategy to consistently define the business unit, department, and product category data and make the data usable across reports.

What should you recommend?

- A. Create a shared dataset for each standardized entity.
- B. Create dataflows for the standardized data and make the dataflows available for use in all imported datasets.
- C. For every report, create and use a single shared dataset that contains the standardized data.
- D. For the three entities, create exports of the data from the Power BI model to Excel and store the data in Microsoft OneDrive for others to use as a source.

Answer: B

Explanation:

Question: 13

DRAG DROP

Once the profit and loss dataset is created, which four actions should you perform in sequence to ensure that the business unit analysts see the appropriate profit and loss data? To answer, move the appropriate actions from the list of actions to the answer area and arrange them in the correct order.

Actions	Answer Area
From powerbi.com, assign the analysts the Contributor role to the workspace.	
From powerbi.com, add role members to the roles.	
From Power BI Desktop, add a Table Filter DAX Expression to the roles.	
From Power BI Desktop, create four roles.	
From Power BI Desktop, publish the dataset to powerbi.com.	

Explanation:

Answer:

Then you want to go in to the Dataset Security on the Service to add the members to the roles that was just created

You want to apply the DAX rule for the 4 roles and validate the expressions

You want to go in to Manage Roles in the Modeling tab to create the RLS roles required

Because no where in the description does it say that the Dataset is available in the Workspace

- 4 From powerbi.com, assign the analysts the Contributor role to the workspace.
- 3 From powerbi.com, add role members to the roles.
- 2 From Power BI Desktop, add a Table Filter DAX Expression to the roles.
- 1 From Power BI Desktop, create four roles.

<https://docs.microsoft.com/en-us/power-bi/admin/service-admin-rls>

<https://docs.microsoft.com/en-us/power-bi/connect-data/service-datasets-build-permissions>

Question: 14

support the reports?

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

Answer: D

Explanation:

"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" => one dataset and two separate workspaces Reason: All data can be imported into one dataset also if these are two logical models. Shared dimensions can be reconsumed in both models. Reports and additional materials can be shared to the board with an app. The "profit and loss" data model needs RLS for the analysts and the analysts must have just read access to the original workspace. In a separate workspace with contributor (or more rights) they can create new reports (with live connection to the dataset). It is also stated that the new reports mustn't be shared so therefore no need to include them into the app. Import vs. DirectQuery: Due to RLS requirements an imported dataset is needed. It is not possible with file sources and Sharepoint lists.

Question: 15

You plan to develop a Power BI report that has a bar chart to display the number of customers by location. You have a table named Customer that has the following columns:

- Customer ID
- CustomerName
- Address
- City
- ProvState
- Country

You need to allow users to drill down by location. The report will display the number of each customer by Country, and drill down to ProvState, and then to City. How should you configure the drill down in the bar chart?

- A. In the Value field, add Country. In the Legend field, add ProvState at the top, followed by City.
- B. In the Legend field, add Country. In the Axis field, add ProvState at the top, followed by City.
- C. In the Axis field, add Country at the top, followed by ProvState, and then City.
- D. In the Value field, add Country at the top, followed by ProvState, and then City.

Answer: C

Explanation:

Reference:

<https://docs.microsoft.com/en-us/power-bi/guided-learning/visualizations#step-18>
<https://docs.microsoft.com/en-us/power-bi/power-bi-visualization-drill-down>

Question: 16

Which DAX expression should you use to get the ending balances in the balance sheet reports?

- A. CALCULATE (
SUM(BalanceSheet [BalanceAmount]),
DATESQTD('Date'[Date])
)
- B. CALCULATE (
SUM(BalanceSheet [BalanceAmount]),
LASTDATE('Date'[Date])
)
- C. FIRSTNONBLANK ('Date'
[Date] SUM(
BalanceSheet[BalanceAmount])
)
- D. CALCULATE (
MAX(
BalanceSheet[BalanceAmount]),
LASTDATE('Date' [Date])
)

Answer: A

Explanation:

Scenario: 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.

DATESQTD returns a table that contains a column of the dates for the quarter to date, in the current context.

Reference:

<https://docs.microsoft.com/en-us/dax/datesqtd-function-dax>

Question: 17

Which two types of visualizations can be used in the balance sheet reports to meet the reporting goals? Each correct answer presents part of the solution.

NOTE: Each correct selection is worth one point.

- A. a line chart that shows balances by quarter filtered to account categories that are long-term liabilities.

- B. a clustered column chart that shows balances by date (x-axis) and account category (legend) without filters.
- C. a clustered column chart that shows balances by quarter filtered to account categories that are long-term liabilities.
- D. a pie chart that shows balances by account category without filters.
- E. a ribbon chart that shows balances by quarter and accounts in the legend.

Answer: AE

Explanation:

<https://docs.microsoft.com/en-us/power-bi/visuals/power-bi-visualization-types-for-reports-and-q-and-a>

Question: 18

HOTSPOT

How should you distribute the reports to the board? To answer, select the appropriate options in the answer area.

NOTE: Each correct selection is worth one point.

Grant access by:

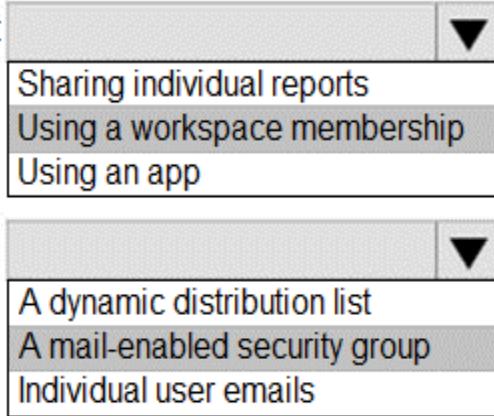
Sharing individual reports
Using a workspace membership
Using an app

Grant access to:

A dynamic distribution list
A mail-enabled security group
Individual user emails

Answer:

Explanation:



The image shows two separate dropdown menus. The top menu, titled 'Grant access by:', has three options: 'Sharing individual reports' (selected), 'Using a workspace membership' (disabled), and 'Using an app'. The bottom menu, titled 'Grant access to:', has three options: 'A dynamic distribution list' (disabled), 'A mail-enabled security group' (selected), and 'Individual user emails' (disabled).

Box 1: Using a workspace membership Scenario:

The company wants to provide a single package of reports to the board that contains custom navigation and links to supplementary information.

Note: Workspace is a shared environment for a group of people. You can have multiple Power BI content in a workspace. One workspace can have hundreds of dashboards, reports, and datasets in it.

Box 2: A mail-enabled security group Scenario: 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.

Topic 3, Northwind

Traders Case study

This is a case study. Case studies are not timed separately. You can use as much exam time as you would like to complete each case. However, there may be additional case studies and sections on this exam. You must manage your time to ensure that you are able to complete all question included on this exam in the time provided.

To answer the questions included in a case study, you will need to reference information that is provided in the case study. Case studies might contain exhibits and other resources that provide more information about the scenario that is described in the case study. Each question is independent of the other question on this case study.

At the end of this case study, a review screen will appear. This screen allows you to review your answers and to make changes before you move to the next section of the exam. After you begin a new section, you cannot return to this section.

To start the case study

To display the first question on this case study, click the Next button. Use the buttons in the left pane to explore the content of the case study before you answer the questions. Clicking these buttons displays information such as business requirements, existing environment, and problem statements.

If the case study has an All Information tab, note that the information displayed is identical to the information displayed on the subsequent tabs. When you are ready to answer a question, click the Question button to return to the question.

Overview. General Overview

Northwind Traders is a specialty food import company.

The company recently implemented Power BI to better understand its top customers, products, and suppliers.

Overview. Business Issues

The sales department relies on the IT department to generate reports in Microsoft SQL Server Reporting Services (SSRS). The IT department takes too long to generate the reports and often misunderstands the report requirements.

Existing Environment. Data Sources

Northwind Traders uses the data sources shown in the following table.

Name	Type	Data size
Source1	Azure SQL database	2 GB
Source2	Microsoft Excel spreadsheet	5 MB

Source2 is exported daily from a third-party system and stored in Microsoft SharePoint Online.

Existing Environment. Customer Worksheet

Source2 contains a single worksheet named Customer Details. The first 11 rows of the worksheet are shown in the following table.

CustomerID	CustomerCRMID	CompanyName	Address	City	Region	PostalCode	Country	Phone
1	ALFKI	Alfreds Futterkiste	Obere Str. 57	Berlin	DE	12209	Germany	(030) 0074321
2	ANATR	Ana Trujillo Emparedados y helados	Avda. de la Constitución 2222	México D.F.	MX	5021	Mexico	(5) 555-4729
3	ANTON	Antonio Moreno Taquería	Mataderos 2312	México D.F.	MX	5023	Mexico	(5) 555-3932
4	AROUT	Around the Horn	120 Hanover Sq.	London	UK	WA1 1DP	UK	(171) 555-7788
5	BERGS	Berglunds snabbköp	Berguvsvägen 8	Luleå	SWE	S-958 22	Sweden	0921-12 34 65
6	BLAUS	Blauer See Delikatessen	Försterstr. 57	Mannheim	DE	68306	Germany	0621-08460
7	BLONP	Blondesddsi père et fils	24, place Kléber	Strasbourg	FRA	67000	France	88 60 15 31
8	BOLID	Bólido Comidas preparadas	C/ Araquil, 67	Madrid	SPN	28023	Spain	(91) 555 22 82
9	BONAP	Bon app'	12, rue des Bouchers	Marseille	FRA	13008	France	91 24 45 40
10	BOTTM	Bottom-Dollar Markets	23 Tsawassen Blvd.	Tsawassen	BC	T2F 8M4	Canada	(604) 555-4729

All the fields in Source2 are mandatory.

The Address column in Customer Details is the billing address, which can differ from the shipping address.

Existing Environment. Azure SQL Database

Source1 contains the following table:

Orders
Products
Suppliers
Categories
Order Details
Sales
Employees

The Orders table contains the following columns.

Name	Is nullable	Data type	Example value	Key
OrderID	No	Int	10248	Primary key
CustomerID	Yes	NCHAR	VINET	Not applicable
OrderDate	Yes	Date	2021-01-04	Not applicable
RequiredDate	Yes	Date	2021-02-01	Not applicable
ShippedDate	Yes	Date	2021-01-16	Not applicable
Freight	Yes	Decimal	32.38	Not applicable
ShipName	Yes	NVARCHAR	Vins et alcools Chevalier	Not applicable
ShipAddress	Yes	NVARCHAR	59 rue de l'Abbaye	Not applicable
ShipCity	Yes	NVARCHAR	Reims	Not applicable
ShipRegion	Yes	NVARCHAR	FRA	Not applicable
ShipPostalCode	Yes	NVARCHAR	511000	Not applicable
ShipCountry	Yes	NVARCHAR	France	Not applicable

The Order Details table contains the following columns.

Name	Is nullable	Data type	Example value	Key
ProductID	No	Int	11	Primary key
ProductName	No	NVARCHAR	Queso Cabrales	Not applicable
SupplierID	Yes	Int	5	Foreign key to Suppliers
CategoryID	Yes	Int	4	Foreign key to Categories
QuantityPerUnit	Yes	NVARCHAR	1 kg pkg.	Not applicable
Discontinued	No	Bit	0	Not applicable

The address in the Orders table is the shipping address, which can differ from the billing address. The Products table contains the following columns.

Name	Is nullable	Data type	Example value	Key
ProductID	No	Int	11	Primary key
ProductName	No	NVARCHAR	Queso Cabrales	Not applicable
SupplierID	Yes	Int	5	Foreign key to Suppliers
CategoryID	Yes	Int	4	Foreign key to Categories
QuantityPerUnit	Yes	NVARCHAR	1 kg pkg.	Not applicable
Discontinued	No	Bit	0	Not applicable

The Categories table contains the following columns.

Name	Is nullable	Data type	Example value	Key
CategoryID	No	int	4	Primary key
CategoryName	No	nvarchar	Dairy Products	Not applicable
Description	Yes	nvarchar	Cheeses	Not applicable

The Suppliers table contains the following columns.

Name	Is nullable	Data type	Example value	Key
SupplierID	No	Int	5	Primary key
CompanyName	No	NVARCHAR	Cooperativa de Quesos 'Las Cabras'	Not applicable
Address	Yes	NVARCHAR	Calle del Rosal 4	Not applicable
City	Yes	NVARCHAR	Oviedo	Not applicable
Region	Yes	NVARCHAR	Asturias	Not applicable
PostalCode	Yes	NVARCHAR	33007	Not applicable
Country	Yes	NVARCHAR	Spain	Not applicable
Phone	Yes	NVARCHAR	(98) 598 76 54	Not applicable

The Sales Employees table contains the following columns.

Name	Is nullable	Data type	Example value	Key
EmployeeID	No	Int	1	Primary key
LastName	No	NVARCHAR	Davolio	Not applicable
FirstName	No	NVARCHAR	Nancy	Not applicable
Title	Yes	NVARCHAR	Sales Representative	Not applicable
HireDate	Yes	Date	2015-02-01	Not applicable
Region	Yes	NVARCHAR	WA	Not applicable
Country	Yes	NVARCHAR	USA	Not applicable
EmailAddress	No	NVARCHAR	ndavolio@northwindtraders.com	Not applicable

Each employee in the Sales Employees table is assigned to one sales region. Multiple employees can be assigned to each region.

Requirements. Report Requirements

Northwind Traders requires the following

reports: Top Products

Top
Customers
On-Time
Shipping

The Top Customers report will show the top 20 customers based on the highest sales amounts in a selected order month or quarter, product category, and sales region.

The Top Products report will show the top 20 products based on the highest sales amounts sold in a selected order month or quarter, sales region, and product category. The report must also show which suppliers provide the top products.

The On-Time Shipping report will show the following metrics for a selected shipping month or quarter:

The percentage of orders that were shipped late by country and shipping region
Customers that had multiple late shipments during the last quarter

Northwind Traders defines late orders as those shipped after the required shipping date.

The warehouse shipping department must be notified if the percentage of late orders within the current month exceeds 5%.

The reports must show historical data for the current calendar year and the last three calendar years.

Requirements. Technical Requirements

Northwind Traders identifies the following technical requirements:

A single dataset must support all three reports.
The reports must be stored in a single Power BI workspace. Report data must be current as of 7 AM Pacific Time each day.

The reports must provide fast response times when users interact with a visualization.
The data model must minimize the size of the dataset as much as possible, while meeting the report requirements and the technical requirements.

Requirements. Security Requirements

Access to the reports must be granted to Azure Active Directory (Azure AD) security groups only. An Azure AD security group exists for each department.

The sales department must be able to perform the following tasks in

Power BI: Create, edit, and delete content in the reports.
Manage permissions for workspaces, datasets, and report.
Publish, unpublish, update, and change the permissions for an app. Assign Azure AD groups role-based access to the reports workspace.

Users in the sales department must be able to access only the data of the sales region to which they are assigned in the Sales Employees table.

Power BI has the following row-level security (RLS) Table filter DAX expression for the Sales Employees table.

[EmailAddress] = USERNAME()

RLS will be applied only to the sales department users. Users in all other departments must be able to view all the data.

Question: 19

You need to design the data model to meet the report

requirements. What should you do in Power BI Desktop?

- A. From Power Query, use a DAX expression to add columns to the Orders table to calculate the calendar quarter of the OrderDate column, the calendar month of the OrderDate column, the calendar quarter of the ShippedDate column, and the calendar month of the ShippedDate column.
- B. From Power Query, add columns to the Orders table to calculate the calendar quarter and the calendar month of the OrderDate column.
- C. From Power BI Desktop, use the Auto date/time option when creating the reports.
- D. From Power Query, add a date table. Create an active relationship to the OrderDate column in the Orders table and an inactive relationship to the ShippedDate column in the Orders table.

Answer: B

Explanation:

Use Power Query to calculate calendar quarter and calendar

month. Scenario:

A single dataset must support all three reports:

- The Top Customers report will show the top 20 customers based on the highest sales amounts in a selected order month or quarter, product category, and sales region.
- The Top Products report will show the top 20 products based on the highest sales amounts sold in a selected order month or quarter, sales region, and product category.

The data model must minimize the size of the dataset as much as possible, while meeting the report requirements and the technical requirements.

Question: 20

HOTSPOT

You need to create a measure that will return the percentage of late orders.

How should you complete the DAX expression? To answer, select the appropriate options in the answer area.

NOTE: Each correct selection is worth one point.

```

Late Orders Percent =
VAR OrderCount =
    COUNTROWS ( 'Orders' )
VAR LateOrders =
    SUM
    COUNTX
    CALCULATE
    CALCULATETABLE
        COUNTROWS ( 'Orders' ),
    ) (Order,
        FILTER
        ALLEXCEPT
        CALCULATE
        DATESBETWEEN
)
RETURN
    DIVIDE ( LateOrders, OrderCount )

```

Orders[OrderDate] > Orders[RequiredDate]
Orders[ShippedDate] >= Orders[OrderDate]
Orders[ShippedDate] < Orders[RequiredDate]
Orders[ShippedDate] > Orders[RequiredDate]

Explanation:

Answer:

```

Late Orders Percent =
VAR OrderCount =
    COUNTROWS ( 'Orders' )
VAR LateOrders =
    SUM
    COUNTX
    CALCULATE
    CALCULATETABLE
        COUNTROWS ( 'Orders' ),
    ) (Order,
        FILTER
        ALLEXCEPT
        CALCULATE
        DATESBETWEEN
)
RETURN
    DIVIDE ( LateOrders, OrderCount )

```

Orders[OrderDate] > Orders[RequiredDate]
Orders[ShippedDate] >= Orders[OrderDate]
Orders[ShippedDate] < Orders[RequiredDate]
Orders[ShippedDate] > Orders[RequiredDate]

Box 1: CALCULATE

CALCULATE evaluates an expression in a modified filter context.

Syntax: CALCULATE(<expression>[, <filter1> [, <filter2>
[, ...]]]) Expression - The expression to be evaluated.

filter1, filter2,... (Optional) Boolean expressions or table expressions that defines filters, or filter modifier functions.

Box 2: FILTER

FILTER returns a table that represents a subset of another table or expression. Syntax: FILTER(<table>,<filter>)

Table- The table to be filtered. The table can also be an expression that results in a table.
 Filter - A Boolean expression that is to be evaluated for each row of the table. For example,
 [Amount]
 > 0 or [Region] = "France"

Box 3: Orders[ShippedDate]> Orders[RequiredDate]

Northwind Traders defines late orders as those shipped after the required shipping date.

Reference:

<https://docs.microsoft.com/en-us/dax/calculate-function-dax>

<https://docs.microsoft.com/en-us/dax/filter-function-dax>

Question: 21

HOTSPOT

You need to create a relationship in the dataset for RLS.

What should you do? To answer, select the appropriate options in the

answer area. NOTE: Each correct selection is worth one point.

Create a	relationship between the Sales Employees table and the
<input type="button" value="one-to-one"/> <input type="button" value="one-to-many"/> <input type="button" value="many-to-one"/> <input type="button" value="many-to-many"/>	<input type="button" value="Orders table"/> <input type="button" value="Suppliers table"/> <input type="button" value="Order Details table"/> <input type="button" value="Customer Details worksheet"/>

Answer:

Explanation:

Create a	relationship between the Sales Employees table and the
<input type="button" value="one-to-one"/> <input type="button" value="one-to-many"/> <input checked="" type="button" value="many-to-one"/> <input type="button" value="many-to-many"/>	<input type="button" value="Orders table"/> <input checked="" type="button" value="Suppliers table"/> <input type="button" value="Order Details table"/> <input type="button" value="Customer Details worksheet"/>

Box 1: many-to-one

Each employee in the Sales Employees table is assigned to one sales region. Multiple employees can be assigned to each region.

The Suppliers table has a Region

column. Box 2: Suppliers table

Question: 22

You need to create the On-Time Shipping report. The report must include a visualization that shows the percentage of late orders.

Which type of visualization should you create?

- A. bar chart
- B. scatterplot
- C. pie chart

Answer: A

Explanation:

Scenario: The On-Time Shipping report will show the following metrics for a selected shipping month or quarter:

The percentage of orders that were shipped late by country and shipping region
Customers that had multiple late shipments during the last quarter

Note: Bar and column charts are some of the most widely used visualization charts in Power BI. They can be used for one or multiple categories. Both these chart types represent data with rectangular bars, where the size of the bar is proportional to the magnitude of data values.

The difference between the two is that if the rectangles are stacked horizontally, it is called a bar chart. If the rectangles are vertically aligned, it is called a column chart.

Reference:

<https://www.pluralsight.com/guides/bar-and-column-charts-in-power-bi>

Question: 23

HOTSPOT

You need to create the Top Customers report.

Which type of filter should you use, and at which level should you apply the filter? To answer, select the appropriate options in the answer area.

NOTE: Each correct selection is worth one point.

Filter type:



Level:



Answer:

Explanation:

Filter type:



Level:



Box 1: Top N

Scenario: The Top Customers report will show the top 20 customers based on the highest sales amounts in a selected order month or quarter, product category, and sales region.

Once you drag to SKU to Visual level filter you should get Top N

option Note: The two most common filter types: automatic and

manual.

Then there are more advanced filters.

Box 2: Visual

Once you drag to SKU to Visual level filter you should get Top N option.

Reference:

<https://powerbidocs.com/2020/01/21/power-bi-top-n-filters/>

Question: 24

You need to minimize the size of the dataset. The solution must meet the report requirements. What should you do?

- A. Change the OrderID column in the Orders table to the text data type.
- B. Filter out discontinued products while importing the Product table.
- C. Remove the QuantityPerUnit column from the Products table
- D. Group the Categories table by the CategoryID column.

Answer: D

Explanation:

Question: 25

You need to configure access for the sales department users. The solution must meet the security requirements. What should you do?

- A. Add the sales department as a member of the reports workspace
- B. Add the Azure Active Directory group of the sales department as an Admin of the reports workspace.
- C. Distribute an app to the users in the Azure Active Directory group of the sales department.
- D. Share each report to the Azure Active Directory group of the sales department.

Answer: D

Explanation:

Question: 26

HOTSPOT

You need to design the data model and the relationships for the Customer Details worksheet and the Orders table by using Power BI. The solution must meet the report requirements.

For each of the following statement, select Yes if the statement is true, Otherwise, select No. NOTE: Each correct selection is worth one point.

Answer Area

Statements	Yes	No
A relationship must be created between the CustomerID column in the Customer Details worksheet and the CustomerID column in the Orders table.	<input type="radio"/>	<input checked="" type="radio"/>
The Data Type of the columns in the relationship between the Customer Details worksheet and the Orders table must be set to Text .	<input type="radio"/>	<input checked="" type="radio"/>
The Region field used to filter the Top Customers report must come from the Orders table.	<input type="radio"/>	<input checked="" type="radio"/>

Answer:

Explanation:

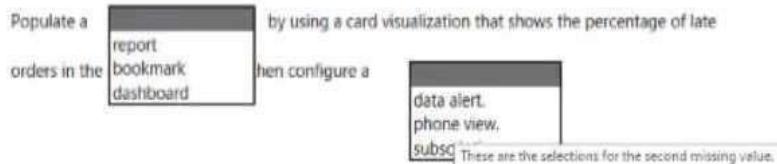
Answer Area

Statements	Yes	No
A relationship must be created between the CustomerID column in the Customer Details worksheet and the CustomerID column in the Orders table.	<input checked="" type="radio"/>	<input type="radio"/>
The Data Type of the columns in the relationship between the Customer Details worksheet and the Orders table must be set to Text .	<input type="radio"/>	<input checked="" type="radio"/>
The Region field used to filter the Top Customers report must come from the Orders table.	<input checked="" type="checkbox"/>	<input type="radio"/>

Question: 27**HOTSPOT**

You need to create a solution to meet the notification requirements of the warehouse shipping department.

What should you do? To answer, select the appropriate options in the answer area. NOTE: Each correct select is worth one point:

Answer Area**Answer:**

Explanation:

Answer Area

Populate a by using a card visualization that shows the percentage of late orders in the current month, and then configure a .

Question: 28

You need to create the dataset. Which dataset mode should you use?

- A. DirectQuery
- B. Import
- C. Live connection

D.Composite

Answer: A

Explanation:

Topic 4, Misc. Questions

Question: 29

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 are modeling data by using Microsoft Power BI. Part of the data model is a large Microsoft SQL Server table named Order that has more than 100 million records.

During the development process, you need to import a sample of the data from the Order table. Solution: You add a WHERE clause to the SQL statement.

Does this meet the goal?

- A. Yes
- B. No

Answer: A

Explanation:

Question: 30

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 are modeling data by using Microsoft Power BI. Part of the data model is a large Microsoft SQL Server table named Order that has more than 100 million records.

During the development process, you need to import a sample of the data from the Order table. Solution: You write a DAX expression that uses the FILTER function.

Does this meet the goal?

- A. Yes
- B. No

Answer: B

Explanation:

The filter is applied after the data is imported. Instead add a WHERE clause to the SQL statement.

Reference:

<https://docs.microsoft.com/en-us/power-bi/connect-data/service-gateway-sql-tutorial>

Question: 31

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 are modeling data by using Microsoft Power BI. Part of the data model is a large Microsoft SQL Server table named Order that has more than 100 million records.

During the development process, you need to import a sample of the data from the Order table. Solution: You add a report-level filter that filters based on the order date.

Does this meet the goal?

- A. Yes
- B. No

Answer: B

Explanation:

The filter is applied after the data is imported. Instead add a WHERE clause to the SQL statement.

Reference:

<https://docs.microsoft.com/en-us/power-bi/connect-data/service-gateway-sql-tutorial>

Question: 32

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 create a parameter named DataSourceExcel that holds the file name and location of a Microsoft Excel data source.

You need to update the query to reference the parameter instead of multiple hard-coded copies of the location within each query definition.

Solution: You add a Power Apps custom visual to the report. Does this meet the goal?

- A. Yes
- B. No

Answer: A

Explanation:

Question: 33

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 create a parameter named DataSourceExcel that holds the file name and location of a Microsoft Excel data source.

You need to update the query to reference the parameter instead of multiple hard-coded copies of the location within each query definition.

Solution: In the Power Query M code, you replace references to the Excel file with DataSourceExcel. Does this meet the goal?

- A. Yes
- B. No

Answer: A

Explanation:

Instead modify the source step of the queries to use DataSourceExcel as the file path.

Note: Parameterising a Data Source could be used in many different use cases. From connecting to different data sources defined in Query Parameters to load different combinations of columns.

Reference:

<https://www.biinsight.com/power-bi-desktop-query-parameters-part-1/>

Question: 34

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 create a parameter named DataSourceExcel that holds the file name and location of a Microsoft Excel data source.

You need to update the query to reference the parameter instead of multiple hard-coded copies of the location within each query definition.

Solution: You create a new query that references DataSourceExcel. Does this meet the goal?

- A. Yes
- B. No

Answer: B

Explanation:

Instead modify the source step of the queries to use DataSourceExcel as the file path.

Note: Parameterising a Data Source could be used in many different use cases. From connecting to different data sources defined in Query Parameters to load different combinations of columns.

Reference:

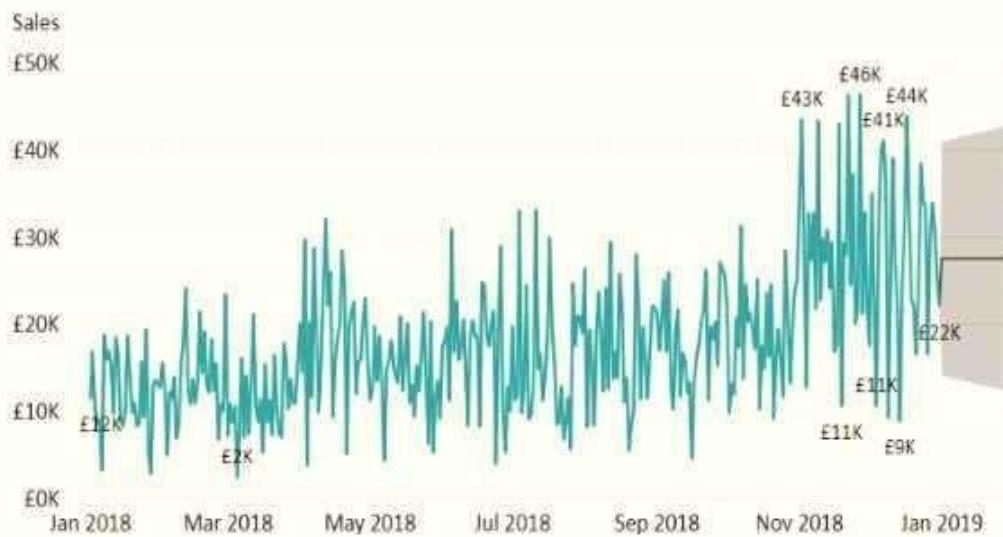
<https://www.biinsight.com/power-bi-desktop-query-parameters-part-1/>

Question: 35

You have the visual shown in the Original exhibit. {Click the Original tab.)



You need to configure the visual as shown in the Modified exhibit. (Click the Modified tab.)



What should you add to the visual?

- A. a measure
- B. a trendline
- C. a forecast
- D. an Average line

Answer: C

Explanation:

Explore forecast results by adjusting the desired confidence interval or by adjusting outlier data to see how they affect results.

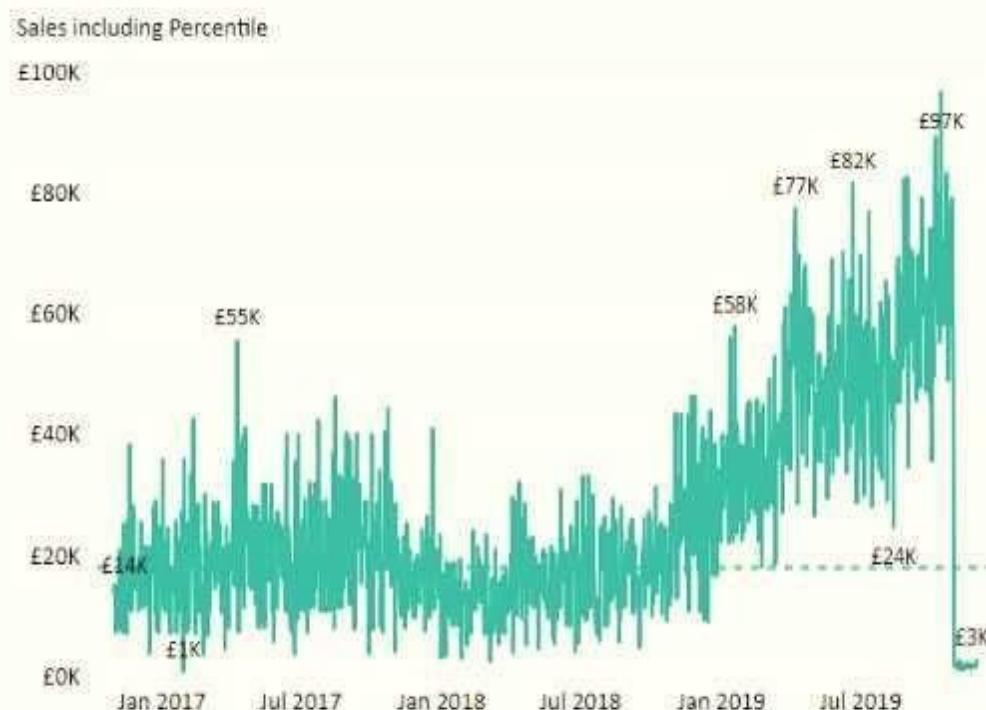


Reference:

<https://powerbi.microsoft.com/fr-fr/blog/introducing-new-forecasting-capabilities-in-power-view-for-office-365/>

Question: 36

You plan to create the chart shown in the following exhibit.



How should you create the dashed horizontal line denoting the 40th percentile of daily sales for the

period shown?

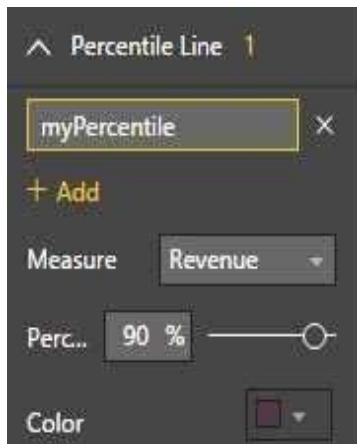
- A. Create a horizontal line that has a fixed value of 24,000.
- B. Add a measure to the visual that uses the following DAX expression. Measure1 = PERCENTILEX.EXC(Sales,Sales[Total Sales],@.40)
- C. Add a new percentile line that uses Total Sales as the measure and 40% as the percentile.
- D. Add a measure to the visual that uses the following DAX expression. Measure1 = PERCENTILEX.INC(Sales,Sales[Total Sales],6.40)

Answer: C

Explanation:

The analytics feature enables you to show percentiles across groups specified along a specific axis. Example:

1. Click on the analytics tab
2. Select Percentile
3. You can choose a specific percentile along with other formatting options.
4. Drag a date or non-numeric dimension into the Axis of a column chart



Add percentile lines to monitor daily revenue



Question: 37

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

Answer: C

Explanation:

Outliers are those data points that lie outside the overall pattern of distribution & the easiest way to detect outliers is through graphs. Box plots, Scatter plots can help detect them easily.

Reference:

<https://towardsdatascience.com>this-article-is-about-identifying-outliers-through-funnel-plots-using-the-microsoft-power-bi-d7ad16ac9ccc>

Question: 38

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. scatter chart
- B. ribbon chart
- C. line chart
- D. key influences

Answer: C

Explanation:

The best data for forecasting is time series data or uniformly increasing whole numbers. The line chart has to have only one line.

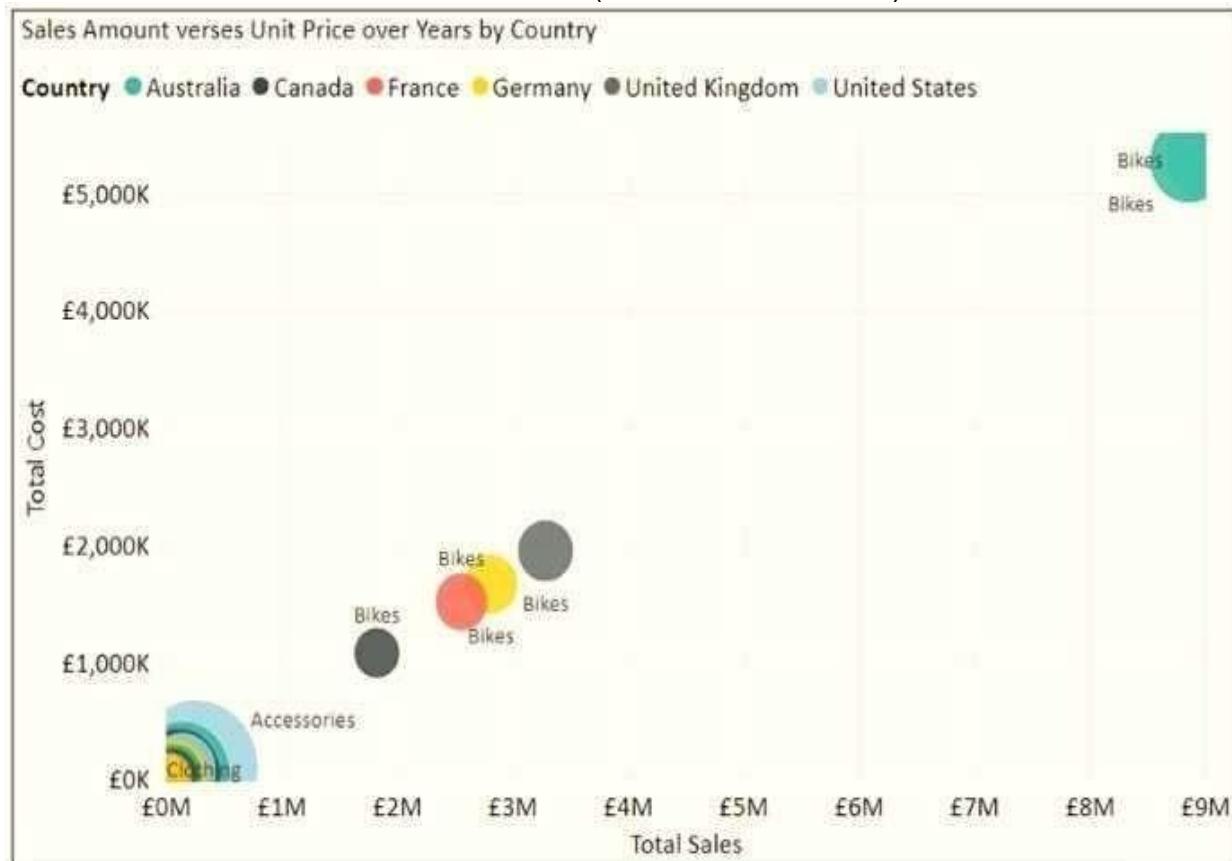
Try forecasting: Try the new forecasting capabilities of Power View today on your own data or with the sample report available as part of the Power BI report samples. To view your own data, upload a workbook with a Power View time series line chart to Power BI for Office 365.

Reference:

<https://powerbi.microsoft.com/en-us/blog/introducing-new-forecasting-capabilities-in-power-view-for-office-365>

Question: 39

You have the visual shown in the exhibit. (Click the Exhibit tab.)



You need to show the relationship between Total Cost and Total Sales over time.

What should you do?

- A. Add a play axis.
- B. Add a slicer for the year.
- C. From the Analytics pane, add an Average line.
- D. Create a DAX measure that calculates year-over-year growth.

Answer: A

Explanation:

You can set up a date field in play axis, and then scatter chart will animate how measure values are compared to each other in each point of a time.

Reference:

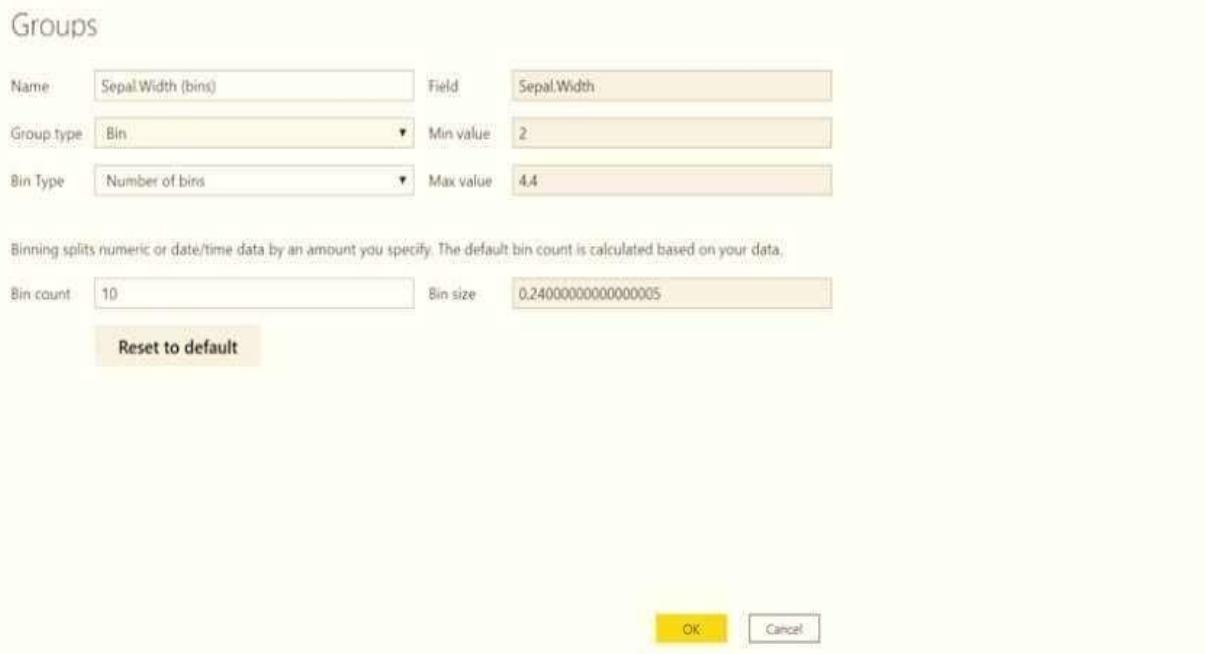
<https://radacad.com/storytelling-with-power-bi-scatter-chart>

Question: 40

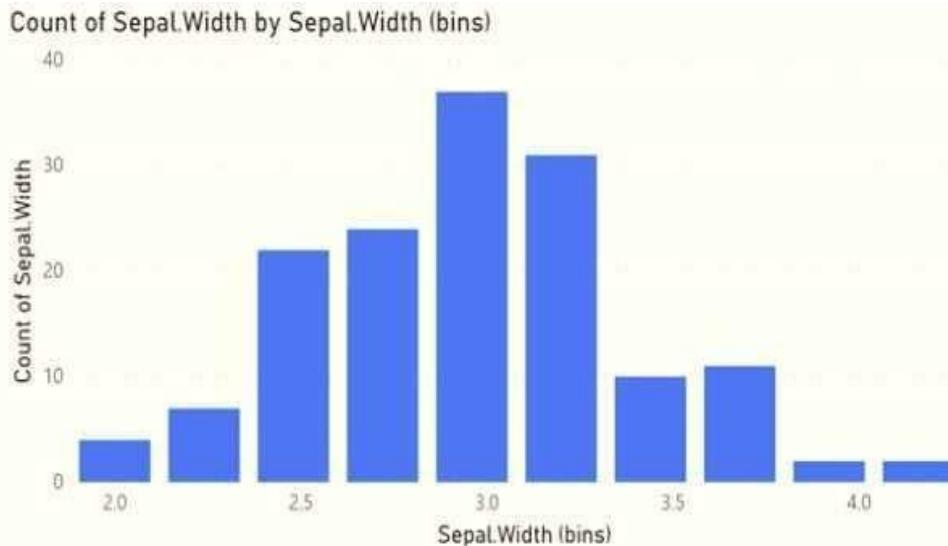
HOTSPOT

You are creating a column chart visualization.

You configure groups as shown in the Groups exhibit. {Click the Groups tab.}



The visualization appears as shown in the Chart exhibit. {Click the Chart tab.}



For each of the following statements, select Yes if the statement is true. Otherwise, select No. NOTE: Each correct selection is worth one point.

Answer Area

Statements	Yes	No
The data is segmented into 10 groups.	<input type="radio"/>	<input type="radio"/>
The data was split into deciles.	<input type="radio"/>	<input type="radio"/>
To increase the bin size, you must decrease the bin count.	<input type="radio"/>	<input type="radio"/>

Answer:

Explanation:

Question: 41

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

Answer: A

Explanation:

The key influencers visual helps you understand the factors that drive a metric you're interested in. It analyzes your data, ranks the factors that matter, and displays them as key influencers.

The key influencers visual is a great choice if you want to: See which factors affect the metric being analyzed.

Contrast the relative importance of these factors. For example, do short-term contracts have more impact on churn than long-term contracts?

Reference:

<https://docs.microsoft.com/en-us/power-bi/visuals/power-bi-visualization-influencers>

Question: 42

HOTSPOT

You need to create a visual as shown in the following exhibit.

MonthName	Total Sales	Sales Last Year	% Growth to Last Year
January	£559,263.79	£144,365.51	74.19%
February	£583,915.29	£215,923.28	63.02%
March	£684,091.92	£211,347.46	69.11%
April	£957,666.49	£350,270.97	63.43%
May	£841,473.26	£310,708.65	63.08%
June	£876,911.71	£298,356.83	65.98%
July	£922,410.09	£348,435.28	62.23%
August	£1,002,219.24	£388,213.68	61.26%
September	£1,152,976.22	£407,595.78	64.65%
October	£1,262,647.67	£465,583.06	63.13%
November	£555,548.44	£555,548.44	0.00%
December	£553,615.45	£553,615.45	0.00%
Total	£9,952,759.56	£4,249,964.36	57.30%

The indicator color for Total Sales will be based on % Growth to Last Year. The solution must use the existing calculations only.

How should you configure the visual? To answer, select the appropriate options in the answer area. NOTE: Each correct selection is worth one point.

Answer Area

Conditional formatting:

Background color
Data bars
Font color
Icons
Web URL

Format by:

Color scale
Field value
Rules

Answer:

Explanation:

Box 1: Background color

To format the Color column based on its field values, select Conditional formatting for the Color field, and then select Background color or Font color.

In the Background color or Font color dialog box, select Field value from the Format by drop-down field.

Box 2: Field value

With conditional formatting for tables in Power BI Desktop, you can specify customized cell colors, including color gradients, based on field values.

Reference:

<https://docs.microsoft.com/en-us/power-bi/create-reports/desktop-conditional-table-formatting>

Question: 43**HOTSPOT**

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

Quick measures

The screenshot shows the 'Quick measures' dialog box in Power BI. On the left, there are several configuration options:

- Calculation:** Set to "Rolling average".
Description: Calculate the average of base value over a certain number of periods before and/or after each date.
Learn more.
- Base value:** A dropdown menu with "Add data fields here".
- Date:** A dropdown menu with "Add data fields here".
- Period:** Set to "Days".
- Periods before:** Set to "1".
- Periods after:** Set to "0".

On the right, there is a list of available fields:

- Customer
- Product
- Sales
- Date
- Gross Margin
- Month
- MonthNumberOfYear
- Quarter
- Sales_SRC
- Time Intelligence
- Total Cost
- Total Order Qty
- Total Sales
- Total Sales rolling average
- Unit Price
- Year

You need to create a monthly rolling average measure for Sales over time-How should you configure the quick measure calculation? To answer, select the appropriate options in the answer area.

NOTE: Each correct selection is worth one point.

Answer Area

Base value:

Month
Total Cost
Total Order Qty
Total Sales
Year

Date:

Date
Month
Total Sales
Year

Period:

Days
Months
Quarters
Years

Answer:

Explanation:

Base value:

Month
Total Cost
Total Order Qty
Total Sales
Year

Date:

Date
Month
Total Sales
Year

Period:

Days
Months
Quarters
Years

Box 1: Total Sales
We select the field Total Sales

Box 2: Date
Select a date field.

Box 3: Month
Monthly periods.

Reference:

<https://docs.microsoft.com/en-us/power-bi/transform-model/desktop-quick-measures>

Question: 44

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

Answer: A

Explanation:

Combining data means connecting to two or more data sources, shaping them as needed, then consolidating them into a useful query.

When you have one or more columns that you'd like to add to another query, you merge the queries.

Note: The RELATEDTABLE function is a shortcut for CALCULATETABLE function with no logical expression.

CALCULATETABLE evaluates a table expression in a modified filter context and returns A table of values.

Reference:

<https://docs.microsoft.com/en-us/power-bi/connect-data/desktop-shape-and-combine-data>

Question: 45

You have a sales system that contains the tables shown in the following table.

Table name	Column name
Sales	sales_ID
	sales_date
	sales_amount
Date	DateID
	Month
	Week
	Year

The Date table is marked as a date table.

DateID is the date data type. You need to create an annual sales growth percentage measure.

Which DAX expression should you use?

- A. `SUM(sales[sales_amount]) - CALCULATE(SUM(sales[sales_amount]), SAMEPERIODLASTYEAR('Date'[DateID]))`
- B. `(SUM('Sales'[sales_amount]) - CALCULATE(SUM('Sales'[sales_amount]), SAMEPERIODLASTYEAR('Date'[DateID]))) / CALCULATE(SUM('Sales'[sales_amount]), SAMEPERIODLASTYEAR('Date'[DateID]))`
- C. `CALCULATE(SUM(sales[sales_amount]), DATESYTD('Date'[DateID]))`
- D. `CALCULATE(SUM(sales[sales_amount]), SAMEPERIODLASTYEAR('Date'[DateID]))`

Answer: B

Explanation:

`SAMEPERIODLASTYEAR` returns a table that contains a column of dates shifted one year back in time from the dates in the specified dates column, in the current context.

Reference:

<https://docs.microsoft.com/en-us/dax/sameperiodlastyear-function-dax>

Question: 46

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

Answer: A

Explanation:

Each customer can have many transactions.
For each transaction there is exactly one customer.

Question: 47

HOTSPOT

You are creating an analytics report that will consume data from the tables shown in the following table.

Table name	Column name	Data type
Sales	sales_id	Integer
	sales_date	Datetime
	Customer_id	Integer
	sales_amount	Floating
	employee_id	Integer
	sales_ship_date	Datetime
	store_id	Varchar(100)
Employee	employee_id	Integer
	first_name	Varchar(100)
	last_name	Varchar(100)
	employee_photo	Binary

There is a relationship between the tables.

There are no reporting requirements on employee_id and employee_photo. You need to optimize the data model

What should you configure for employee_id and employee.photo? To answer, select the appropriate options in the answer area.

Answer Area

Employee_id:

Change Type
Delete
Hide
Sort

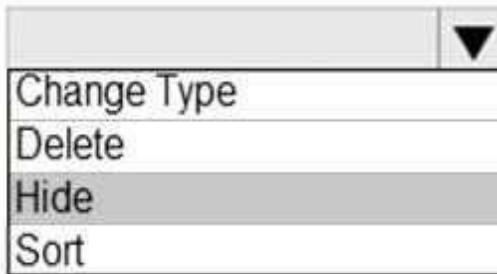
Employee_photo:

Change Type
Delete
Hide
Sort

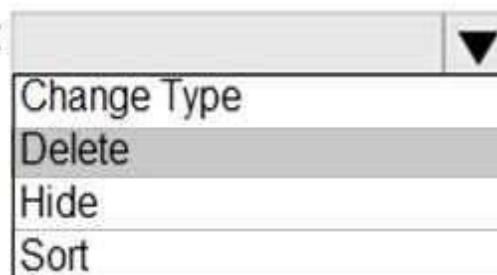
Explanation:

Answer:

Employee_id:



Employee_photo:

**Box 1: Hide**

Optimize data by hiding fields and sorting visualization data

Box 2: Delete

The fastest way to optimize your Power BI report is to limit the number of columns to only the ones you need in your data model. Go through your tables in Power Query and determine what fields are being used. Delete these columns if they are not being used in any of your reports or calculations.

Reference:

<https://tessellationtech.io/optimizing-power-bi-reports/>

Question: 48**HOTSPOT**

You are creating a Microsoft Power BI model that has two tables named CityData and Sales. CityData contains only the data shown in the following table.

State (CityData)	City	Population (million)
CA	Los Angeles	4.00
CA	San Francisco	0.90
New York	New York	8.50
WA	Seattle	0.70
WA	Spokane	0.20

Sales contains only the data shown in the following table.

State (Sales)	Type	Sales
CA	Internet	60
CA	Store	80
TX	Store	400
WA	Internet	150
WA	Store	100

For each of the following statements, select Yes if the statement is true. Otherwise, select No. NOTE: Each correct selection is worth one point.

Answer Area

Statements	Yes	No
In the Sales table, you can write a DAX expression that uses the RELATED() function to get data from the CityData table.	<input type="radio"/>	<input type="radio"/>
A DAX expression of sales total =CALCULATE(SUM(Sales[Sales]),ALL(Sales)) will produce the correct total sales value for each state, based on the data model.	<input type="radio"/>	<input type="radio"/>
A table visualization that uses CityData[State] and Sales[Sales] will contain sales from the state of TX.	<input type="radio"/>	<input type="radio"/>

Answer:

Explanation:

Statements	Yes	No
In the Sales table, you can write a DAX expression that uses the RELATED() function to get data from the CityData table.	<input checked="" type="radio"/>	<input type="radio"/>
A DAX expression of sales total =CALCULATE(SUM(Sales[Sales]),ALL(Sales)) will produce the correct total sales value for each state, based on the data model.	<input type="radio"/>	<input checked="" type="radio"/>
A table visualization that uses CityData[State] and Sales[Sales] will contain sales from the state of TX.	<input type="radio"/>	<input checked="" type="radio"/>

Box 1: Yes

The Related function returns a related value from another table.

The RELATED function requires that a relationship exists between the current table and the table with related information. You specify the column that contains the data that you want, and the function follows an existing many-to-one relationship to fetch the value from the specified column in the related table. If a relationship does not exist, you must create a relationship.

Box 2: Yes

Box 3: No

TX only occurs in the Sales table, but not in the CityData table.

Reference:

<https://docs.microsoft.com/en-us/dax/related-function-dax>

<https://docs.microsoft.com/en-us/dax/calculate-function-dax>

Question: 49

DRAG DROP

You build a report about warehouse inventory dat

a. The dataset has more than 10 million product records from 200 warehouses worldwide. You have a table named Products that contains the columns shown in the following table.

Name	Sample data
ProductDescription	Bikes > Adventure Works > Mountain Bikes > Super Carbon Bike > 26in wheels 42in frame
ProductCategory	Bikes
Manufacturer	Adventure Works
ProductSubcategory	Mountain Bikes
ProductSpecification	26in wheels 42in frame

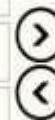
Warehouse managers report that it is difficult to use the report because the report uses only the product name in tables and visuals. The product name is contained within the ProductDescription column and is always the fourth value.

You need to modify the report to support the warehouse managers requirement to explore inventory levels at different levels of the product hierarchy. The solution must minimize the model size.

Which three actions should you perform in sequence? To answer, move the appropriate actions from the list of actions to the answer area and arrange them in the correct order.

Actions

- Create a product hierarchy of Manufacturer, ProductSpecifications, ProductName, ProductSubcategory, and ProductCategory.
- Replace the use of ProductDescription in the report with the product hierarchy.
- Transform the ProductDescription column to contain only the text between the first and fourth > symbol.
- Add the product hierarchy as an extra field in visuals where ProductDescription is used.
- Add a column named ProductName that contains only the text between the third and fourth > symbol in the ProductDescription column.
- Add a column named ProductName that contains all the text after the third > symbol in the ProductDescription column.
- Create a product hierarchy of ProductCategory, ProductSubcategory, Manufacturer, ProductName, and ProductSpecifications.

Answer Area

Answer:

Explanation:

Actions

Create a product hierarchy of Manufacturer, ProductSpecifications, ProductName, ProductSubcategory, and ProductCategory.

3

Replace the use of ProductDescription in the report with the product hierarchy.

Transform the ProductDescription column to contain only the text between the first and fourth > symbol.

Add the product hierarchy as an extra field in visuals where ProductDescription is used.

1

Add a column named ProductName that contains only the text between the third and fourth > symbol in the ProductDescription column.

Add a column named ProductName that contains all the text after the third > symbol in the ProductDescription column.

2

Create a product hierarchy of ProductCategory, ProductSubcategory, Manufacturer, ProductName, and ProductSpecifications.

Question: 50

HOTSPOT

You are creating a Microsoft Power BI imported data model to perform basket analysis. The goal of the analysis is to identify which products are usually bought together in the same transaction across and within sales territories.

You import a fact table named Sales as shown in the exhibit. (Click the Exhibit tab.)

Column name	Data type	Description
SalesRowID	Integer	ID of the row from the source system, which represents a unique combination of SalesOrderNumber and SalesOrderLineNumber
ProductKey	Integer	Surrogate key that relates to the product dimension
OrderDateKey	Integer	Surrogate key that relates to the date dimension and is in the YYYYMMDD format
OrderDate	Datetime	Date and time an order was processed
CustomerKey	Integer	Surrogate key that relates to the customer dimension
SalesTerritoryKey	Integer	Surrogate key that relates to the sales territory dimension
SalesOrderNumber	Integer	Unique identifier of an order
SalesOrderLineNumber	Integer	Unique identifier of a line within an order
OrderQuantity	Integer	Quantity of the product ordered
LineTotal	Decimal	Total sales amount of a line before tax
TaxAmt	Decimal	Amount of tax charged for the items on a specified line within an order
Freight	Decimal	Amount of freight charged for the items on a specified line within an order
LastModified	Datetime	The date and time that a row was last modified in the source system
AuditID	Integer	The ID of the data load process that last updated a row

The related dimension tables are imported into the model.

For each of the following statements, select Yes if the statement is true. Otherwise, select

No. NOTE: Each correct selection is worth one point.

Answer Area

Statements	Yes	No
The SalesRowID and AuditID columns can be removed from the model without impeding the analysis goals.	<input type="radio"/>	<input checked="" type="radio"/>
Both the OrderDateKey and OrderDate columns are necessary to perform the basket analysis.	<input type="radio"/>	<input checked="" type="radio"/>
The TaxAmt column must retain the current number of decimal places to perform the basket analysis.	<input type="radio"/>	<input checked="" type="radio"/>

Answer:

Explanation:

Statements	Yes	No
The SalesRowID and AuditID columns can be removed from the model without impeding the analysis goals.	<input checked="" type="radio"/>	<input type="radio"/>
Both the OrderDateKey and OrderDate columns are necessary to perform the basket analysis.	<input checked="" type="radio"/>	<input type="radio"/>
The TaxAmt column must retain the current number of decimal places to perform the basket analysis.	<input checked="" type="radio"/>	<input type="radio"/>

Reference:

<https://finance-bi.com/power-bi-basket-analysis/>

Question: 51

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. Add a description of "subscriber count" to the Customer Count measure.

B. Set Summarize By to None for the CustomerID column.

C. Add a description of "Subscriber" to the Customer table.

D. Add a synonym of "subscriber" to the Customer table.

Answer: B

Explanation:

You can add synonyms to tables and columns.

Note: This step applies specifically to Q&A (and not to Power BI reports in general). Users often have a variety of terms they use to refer to the same thing, such as total sales, net sales, total net sales. You can add these synonyms to tables and columns in the Power BI model.

This step applies specifically to Q&A (and not to Power BI reports in general). Users often have a variety of terms they use to refer to the same thing, such as total sales, net sales, total net sales. You can add these synonyms to tables and columns in the Power BI model.

Reference:

<https://docs.microsoft.com/en-us/power-bi/natural-language/q-and-a-best-practices>

Question: 52

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 custom 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. Split the visuals onto multiple pages.
- B. Implement row-level security (RLS).
- C. Replace the default visuals with custom visuals.
- D. Increase the number of times that the dataset is refreshed.

Answer: A

Explanation:

Question: 53

DRAG DROP

You have a Microsoft Power BI workspace.

You need to grant the user capabilities shown in the following table.

User name	Task
User1	Create and publish apps.
User2	Publish reports to the workspace and delete dashboards.

The solution must use the principle of least privilege.

Which user role should you assign to each user? To answer, drag the appropriate roles to the correct users. Each role may be used once, more than once, or not at all. You may need to drag the split bar between panes or scroll to view content.

NOTE: Each correct selection is worth one point.

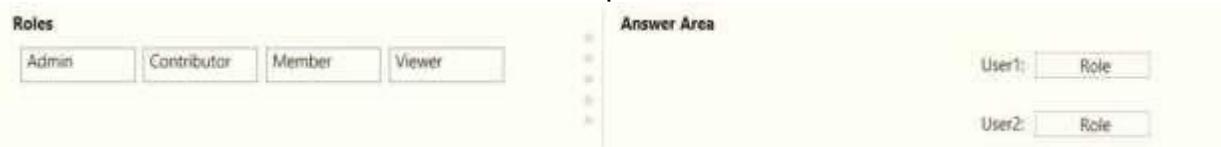
Roles

Admin Contributor Member Viewer

Answer Area

User1: Role

User2: Role



Answer:

Explanation:

User 1 = Member

User 2 =

Contributor

<https://docs.microsoft.com/en-us/power-bi/collaborate-share/service-new-workspaces>

Question: 54

You have four sales regions. Each region has multiple sales managers.

You implement row-level security (RLS) in a data model. You assign the relevant distribution lists to each role.

You have sales reports that enable analysis by region. The sales managers can view the sales records of their region. The sales managers are prevented from viewing records from other regions.

A sales manager changes to a different region.

You need to ensure that the sales manager can see the correct sales data. What should you do?

- A. From Microsoft Power BI Desktop, edit the Row-Level Security setting for the reports.
- B. Change the Microsoft Power BI license type of the sales manager.
- C. Manage the permissions of the underlying dataset
- D. Request that the sales manager be added to the correct Azure Active Directory group.

Answer: D

Explanation:

Using AD Security Groups, you no longer need to maintain a long list of users.

All that you will need to do is to put in the AD Security group with the required permissions and Power BI will do the REST! This means a small and simple security file with the permissions and AD Security group.

Note: Configure role mappings

Once published to Power BI, you must map members to dataset roles.

Members can be user accounts or security groups. Whenever possible, we recommend you map security groups to dataset roles. It involves managing security group memberships in Azure Active Directory. Possibly, it delegates the task to your network administrators.

Reference:

<https://www.fourmoo.com/2018/02/20/dynamic-row-level-security-is-easy-with-active-directory-security-groups/>

<https://docs.microsoft.com/en-us/power-bi/guidance/rls-guidance>

Question: 55

You have five sales regions. Each region is assigned a single salesperson.

You have an imported dataset that has a dynamic row-level security (RLS) role named Sales. The Sales role filters sales transaction data by salesperson.

Salespeople must see only the data from their region.

You publish the dataset to powerbi.com, set RLS role membership, and distribute the dataset and related reports to the salespeople.

A salesperson reports that she believes she should see more data.

You need to verify what data the salesperson currently sees. What should you do?

- A. Use the Test as role option to view data as the salesperson's user account.
- B. Use the Test as role option to view data as the Sales role.
- C. Instruct the salesperson to open the report in Microsoft Power BI Desktop.
- D. Filter the data in the reports to match the intended logic in the filter on the sales transaction table.

Answer: B

Explanation:

Validate the roles within Power BI Desktop

After you've created your roles, test the results of the roles within Power BI

Desktop. From the Modeling tab, select View as.



The View as roles window appears, where you see the roles you've created.



Select a role you created, and then select OK to apply that role.

The report renders the data relevant for that role.

You can also select Other user and supply a given user.



Select

OK.

The report renders based on what that user can

see. Reference:

<https://docs.microsoft.com/en-us/power-bi/admin/service-admin-rls>

Question: 56

You have a collection of reports for the HR department of your company. The datasets use row-level security (RLS). The company has multiple sales regions that each has an HR manager. You need to ensure that the HR managers can interact with the data from their region only. The HR managers must be prevented from changing the layout of the reports. How should you provision access to the reports for the HR managers?

- A. Create a new workspace, copy the datasets and reports, and add the HR managers as members of the workspace.
- B. Publish the reports to a different workspace other than the one hosting the datasets.
- C. Publish the reports in an app and grant the HR managers access permission.
- D. Add the HR managers as members of the existing workspace that hosts the reports and the datasets.

Answer: C

Explanation:

Note: Row-level security (RLS) with Power BI can be used to restrict data access for given users. Filters restrict data access at the row level, and you can define filters within roles. In the Power BI service, members of a workspace have access to datasets in the workspace. RLS doesn't restrict this data access.

Reference:

<https://docs.microsoft.com/en-us/power-bi/admin/service-admin-rls>

Question: 57

Your company plans to completely separate development and production assets such as datasets, reports, and dashboards in Microsoft Power BI.

You need to recommend an application lifecycle strategy. The solution must minimize maintenance to update access and prevent end users from viewing the development assets.

What should you recommend?

- A. Create production reports in a separate workspace that uses a shared dataset from the development workspace. Grant the end users access to the production workspace.
- B. In the same workspace, create separate copies of the assets and append DEV to the names of the copied assets. Grant the end users access to the workspace.
- C. Create separate workspaces for development and production. Grant the end users access to the production workspace.
- D. Create one workspace for development. From the workspace, publish an app for production.

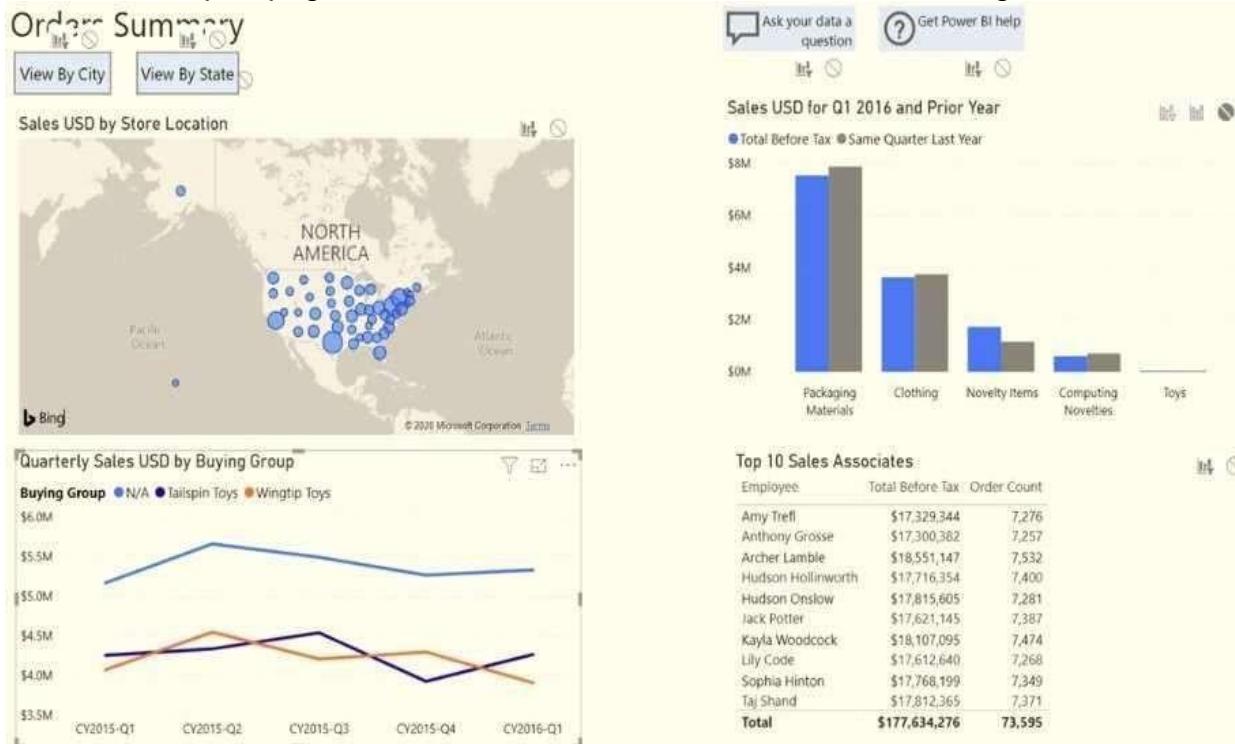
Answer: C

Explanation:

Question: 58

HOTSPOT

You have a report page that contains the visuals shown in the following exhibit.



Use the drop-down menus to select the answer choice that completes each statement based on the information presented in the graphic. NOTE: Each correct selection is worth one point.

Answer Area

Selecting a quarter on the line chart will [answer choice] the clustered column chart.

cross-filter
cross-highlight
not affect

Selecting a data point on the Tailspin Toys line on the line chart will [answer choice] the map.

cross-filter
cross-highlight
not affect

Answer:

Explanation:

Selecting a quarter on the line chart will **[answer choice]** the clustered column chart.

cross-filter
cross-highlight
not affect

Selecting a data point on the Tailspin Toys line on the line chart will **[answer choice]** the map.

cross-filter
cross-highlight
not affect

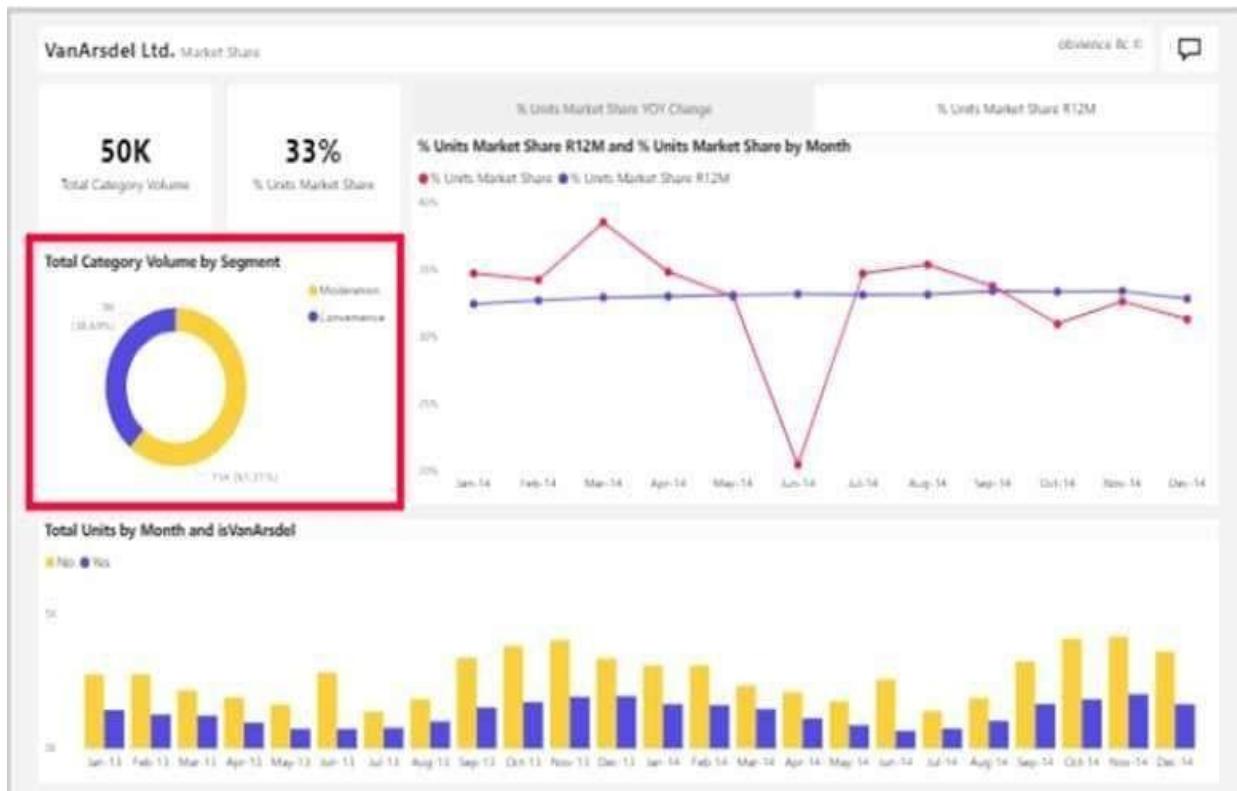
Box 1: cross-filter

By default, selecting a data point in one visual on a report page will cross-filter or cross-highlight the other visuals on the page.

Box 2: cross-

highlight Example:

By default, selecting a data point in one visual on a report page will cross-filter or cross-highlight the other visuals on the page.



1. Let's see what happens when we select Moderation.



2. Cross-filtering removes data that doesn't apply. Selecting Moderation in the doughnut chart cross-filters the line chart. The line chart now only displays data points for the Moderation segment.

3. Cross-highlighting retains all the original data points but dims the portion that does not apply to

your selection. Selecting Moderation in the doughnut chart cross-highlights the column chart. The column chart dims all the data that applies to the Convenience segment and highlights all the data that applies to the Moderation segment.

Reference:

<https://docs.microsoft.com/en-us/power-bi/consumer/end-user-interactions>

Question: 59

You are creating a visual to show the ranking of product categories by sales revenue. Your company's security policy states that you cannot send data outside of your Microsoft Power BI tenant

Which approach provides the widest variety of visuals while adhering to the security policy?

- A. Use default visuals or custom visuals uploaded from a .pbviz file.
- B. Use only default visuals.
- C. Use default or any custom visuals from the marketplace.
- D. Use default or certified custom visuals.

Answer: C

Explanation:

Question: 60

You have a Microsoft Power BI dashboard. The report used to create the dashboard uses an imported dataset from a Microsoft SQL Server data source. The dashboard is shown in the exhibit. (Click the Exhibit tab.)

Variance to Plan, Variance to Plan % BY BUSINESS AREA • REFRESHED 12:03:06 PM



What occurred at 12:03:06 PM?

- A. A user pressed F5
- B. A new transaction was added to the data source.
- C. A user added a comment to a tile.
- D. The dashboard tile cache refreshed.

Answer: D

Explanation:

Reference:

<https://docs.microsoft.com/en-us/power-bi/connect-data/refresh-data>

Question: 61

You have a report that contains four pages. Each page contains slicers for the same four fields. Users report that when they select values on a slicer on one page, the visuals are not updated on all the pages. You need to recommend a solution to ensure that users can select a value once to filter the results on all the pages. What are two possible recommendations to achieve this goal? Each correct answer presents a complete solution. NOTE: Each correct selection is worth one point.

- A. Sync the slicers across the pages.
- B. Replace the slicers with page-level filters.
- C. Replace the slicers with visual-level filters.
- D. Create a bookmark for each slicer value.
- E. Replace the slicers with report-level filters.

Answer: AE

Explanation:

Add a report-level filter to filter an entire report.

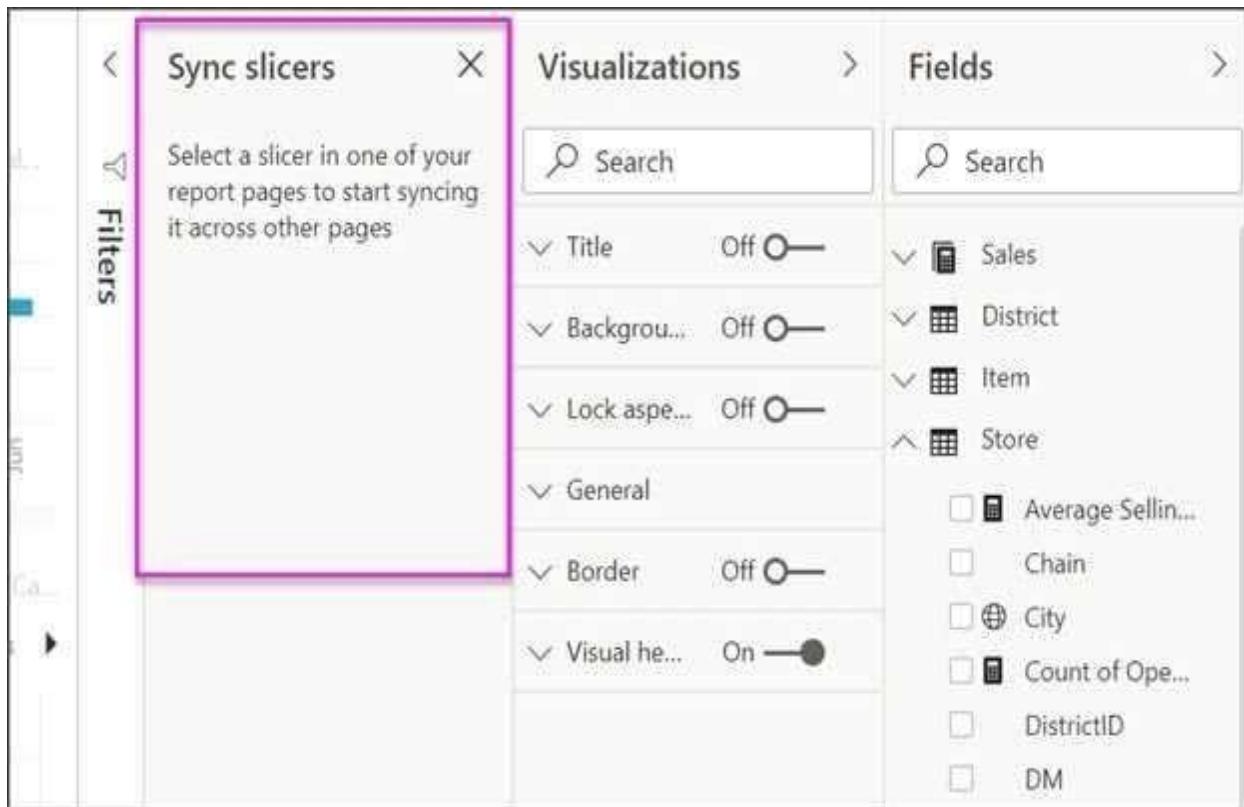
The visuals on the active page, and on all pages in the report, change to reflect the

new filter. You can sync a slicer and use it on any or all pages in a report.

1. On the Power BI Desktop View menu, select Sync slicers.



The Sync slicers pane appears between the Filters and Visualizations panes.



Reference:

<https://docs.microsoft.com/en-us/power-bi/create-reports/power-bi-report-add-filter>

<https://docs.microsoft.com/en-us/power-bi/visuals/power-bi-visualization-slicers>

Question: 62

You are developing a report page. Some users will navigate the report by using a keyboard, and some users will consume the report by using a screen reader. You need to ensure that the users can consume the content on a report page in a logical order. What should you configure in Microsoft Power BI Desktop?

- A. the bookmark order
- B. the layer order
- C. the tab order
- D. the X position

Answer: C

Explanation:

If you find yourself unable to navigate to an object or visual while using a keyboard, it may be because the report author has decided to hide that object from the tab order. Report authors commonly hide decorative objects from the tab order. If you find that you cannot tab through a report in a logical manner, you should contact the report author. Report authors can set the tab order for objects and visuals.

Reference:

<https://docs.microsoft.com/en-us/power-bi/create-reports/desktop-accessibility-consuming-tools>

Question: 63

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

Answer: B

Explanation:

You can subscribe yourself and your colleagues to the report pages, dashboards, and paginated reports that matter most to you. Power BI e-mail subscriptions allow you to: Decide how often you want to receive the emails: daily, weekly, hourly, monthly, or once a day after the initial data refresh.

Choose the time you want to receive the email, if you choose daily, weekly, hourly, or monthly.

Note: Email subscriptions don't support most custom visuals. The one exception is those custom visuals that have been certified.

Email subscriptions don't support R-powered custom visuals at this time.

Incorrect Answers:

A: Set data alerts to notify you when data in your dashboards changes beyond limits you set.

Reference:

<https://docs.microsoft.com/en-us/power-bi/collaborate-share/service-report-subscribe>

<https://docs.microsoft.com/en-us/power-bi/create-reports/service-set-data-alerts>

Question: 64

You have multiple dashboards.

You need to ensure that when users browse the available dashboards from powerbi.com, they can see which dashboards contain Personally Identifiable Information (PII). The solution must minimize configuration effort and impact on the dashboard design.

What should you use?

- A. Active Directory groups

- B.tiles
- C.data classifications
- D.comments

Answer: A

Explanation:

Question: 65

You publish a report to a workspace named Customer Services. The report identifies customers that have potential data quality issues that must be investigated by the customer services department of your company.

You need to ensure that customer service managers can create task lists in Microsoft Excel based on the data.

Which report setting should you configure?

- A.Don't allow end user to save filters on this report.
- B.Change default visual interaction from cross highlighting to cross filtering.
- C.Enable the updated filter pane, and show filters in the visual header for this report.
- D.Allow users to add comments to this report.
- E.Choose the type of data you allow your end users to export.

Answer: E

Explanation:

<https://powerbi.microsoft.com/en-us/blog/announcing-persistent-filters-in-the-service/>

Question: 66

You have a report that contains three pages. One of the pages contains a KPI visualization. You need to filter all the visualizations in the report except for the KPI visualization. Which two actions should you perform? Each correct answer presents part of the solution.
NOTE: Each correct selection is worth one point.

- A.Add the same slicer to each page and configure Sync slicers.
- B.Edit the interactions of the KPI visualization.
- C.Configure a page-level filter.
- D.Edit the interactions of the slicer that is on the same page as the KPI visualization.
- E.Configure a report-level filter.

Answer: AD

Explanation:

Slicers are another way of filtering. They narrow the portion of the dataset that is shown in the other

report visualizations.

By default, slicers on report pages affect all the other visualizations on that page, including each other. Use visual interactions to exclude some page visualizations from being affected by others.

Reference:

<https://docs.microsoft.com/en-us/power-bi/visuals/power-bi-visualization-slicers>

Question: 67

You have a Microsoft Power BI dashboard.

You need to ensure that consumers of the dashboard can give you feedback that will be visible to the other consumers of the dashboard.

What should you use?

- A. Feedback
- B. Subscribe
- C. Comments
- D. Mark as favorite

Answer: C

Explanation:

<https://docs.microsoft.com/en-us/power-bi/consumer/end-user-comment>

Question: 68

HOTSPOT

You have two Azure SQL databases that contain the same tables and columns.

For each database, you create a query that retrieves data from a table named Customers.

You need to combine the Customer tables into a single table. The solution must minimize the size of the data model and support scheduled refresh in powerbi.com.

What should you do? To answer, select the appropriate options in the answer area. NOTE: Each correct selection is worth one point.

Answer Area

Option to use to combine the Customer tables:

- Append Queries
- Append Queries as New
- Merge Queries
- Merge Queries as New

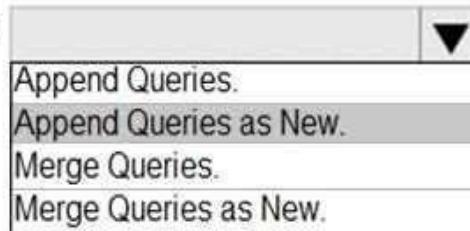
Action to perform on the original two SQL database queries:

- Delete the queries.
- Disable including the query in report refresh.
- Disable loading the query to the data model.
- Duplicate the queries.

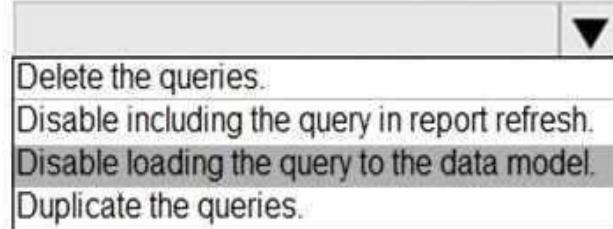
Answer:

Explanation:

Option to use to combine the Customer tables:



Action to perform on the original two SQL database queries:



Box 1: Append Queries as New.

There are two primary ways of combining queries: merging and appending.

When you have one or more columns that you'd like to add to another query, you merge the queries. When you have additional rows of data that you'd like to add to an existing query, you append the query.

Box 2: Disable loading the query to the data model

For every query that loads into model memory will be consumed. and Memory is our asset in the Model, less memory consumption leads to better performance in most of the cases. The best approach is to disable loading.

Reference:

<https://docs.microsoft.com/en-us/power-query/append-queries>

Question: 69

You have a Microsoft SharePoint Online site that contains 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 load only the manufacturing reports to a table for analysis. What should you do in Microsoft Power BI Desktop?

- 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. Edit the query and filter by the path to the manufacturing reports library.
- C. Get data from a SharePoint Online folder and enter the site URL. Edit the query and filter by the 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

Explanation:

Example:

My SharePoint site root url is <https://powerbipanama.sharepoint.com/>, but all of my files are actually in another site that starts with <https://powerbipanama.sharepoint.com/sites/externalsales/> URL.

In order to use the correct URL, we need to be in the folder of the data that we're trying to get and check the url that our browser shows. If it has the if it starts with the format of [Error! Hyperlink reference not valid.](#) address>/sites/<sitename>/ then we need to use that url, otherwise we use the much simpler [Error! Hyperlink reference not valid.](#) address>

In my own case, I'll be using the <https://powerbipanama.sharepoint.com/sites/externalsales> url in order to connect to my site.

Reference:

<https://powerbi.microsoft.com/sv-se/blog/combining-excel-files-hosted-on-a-sharepoint-folder/>

Question: 70

HOTSPOT

You have a folder of monthly transaction extracts.

You plan to create a report to analyze the transaction data.

You receive the following email message: "Hi. I've put 24 files of monthly transaction data onto the shared drive. File Transactions201901.csv through Transactions201912.csv have the latest set of columns, but files Transactions201801.csv to Transactions201812.csv have an older layout without the extra fields needed for analysis. Each file contains 10 to 50 transactions."

You get data from the folder and select Combine & Load. The Combine Files dialog box is shown in the exhibit. (Click the Exhibit tab.)

Combine Files

Specify the settings for each file. Learn more

Sample File:

First file	Delimiter	Data Type Detection	
1252: Western European (Windows)	Comma	Based on entire dataset	
ID	Date	CustomerID	Amount
1	01/01/2018 08:00:00	5	28.99
2	01/01/2018 18:00:00	10	31.88
3	02/01/2018 08:00:00	15	22.99
4	02/01/2018 18:00:00	25	14.25
5	03/01/2018 08:00:00	35	85
6	03/01/2018 18:00:00	45	47.74
7	04/01/2018 08:00:00	55	76.66
8	04/01/2018 18:00:00	51	99.99
9	05/01/2018 08:00:00	52	10.99
10	05/01/2018 18:00:00	58	85

Skip files with errors

OK

Cancel

For each of the following statements, select Yes if the statement is true. Otherwise, select No. NOTE: Each correct selection is worth one point.

Answer Area

- | Statements | Yes | No |
|--|-----------------------|-----------------------|
| The resulting query will contain all the columns from the 2018 transactions. | <input type="radio"/> | <input type="radio"/> |
| The resulting query will contain all the columns from the 2019 transactions. | <input type="radio"/> | <input type="radio"/> |
| Setting Data Type Detection to Based on first 200 rows will improve import times. | <input type="radio"/> | <input type="radio"/> |

Answer:

Explanation:

Statements	Yes	No
The resulting query will contain all the columns from the 2018 transactions.	<input type="radio"/>	<input type="radio"/>
The resulting query will contain all the columns from the 2019 transactions.	<input type="radio"/>	<input type="radio"/>
Setting Data Type Detection to Based on first 200 rows will improve import times.	<input type="radio"/>	<input type="radio"/>

Box 1: Yes

The four columns used in the 2018 transactions are already displayed.

Box 2: Yes

The columns used are based on the entire dataset. The additional columns in the 2019 files will be detected.

Box 3: Yes

Note: Under the hoods, Power BI will automatically detect which delimiter to use, and may even promote the first row as headers. You can manually change the delimiter, or define how Power BI should handle data types. You can set it to automatically detect data types based on first 200 rows, or the entire dataset or you can even opt out the detection of data types.

Question: 71

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

Explanation:

Example:

Replace the text "ur" with the text "or" in the table.

```

Table.ReplaceValue(
    Table.FromRecords({
        [a = 1, b = "hello"],
        [a = 3, b = "wurld"]
    }),
    "ur",
    "or",
    Replacer.ReplaceText,
    {"b"}
)

```

a	b
1	hello
3	world

Reference:

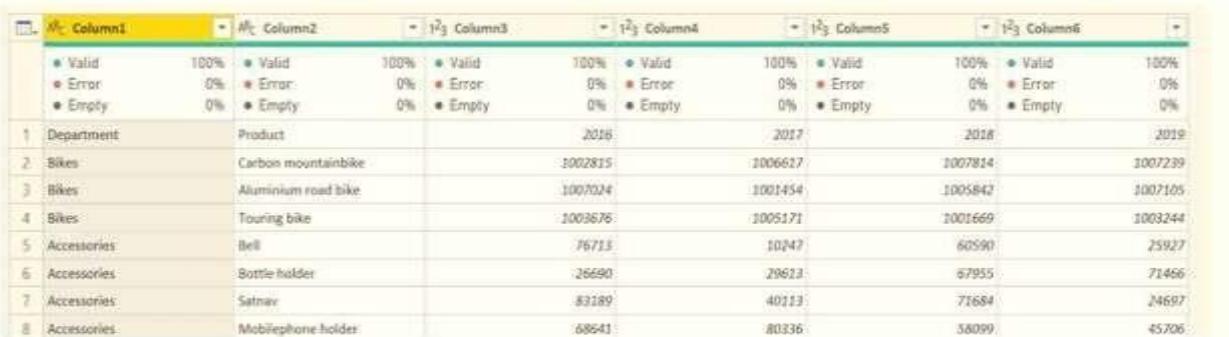
<https://docs.microsoft.com/en-us/powerquery-m/table-replacevalue>

Question: 72

DRAG DROP

You receive revenue data that must be included in Microsoft Power BI reports.

You perform an initial load of the data from a Microsoft Excel source as shown in the following exhibit.



The screenshot shows an Excel spreadsheet with six columns labeled Column1 through Column6. The first row contains percentage values for 'Valid', 'Error', and 'Empty' status across all columns. Subsequent rows show data for different product categories (Bikes, Accessories) and their revenue for each year. The data is as follows:

	Column1	Column2	Column3	Column4	Column5	Column6
1	Department	Product	2016	2017	2018	2019
2	Bikes	Carbon mountainbike	3002815	1006617	1007814	1007239
3	Bikes	Aluminum road bike	1007024	1001454	1005842	1003105
4	Bikes	Touring bike	1003616	1005171	1001669	1003244
5	Accessories	Bell	76713	10427	60590	25927
6	Accessories	Bottle holder	26690	29623	67955	71466
7	Accessories	Satnav	83189	40213	71684	24697
8	Accessories	Mobilephone holder	68641	80336	58099	45706

You plan to create several visuals from the data, including a visual that shows revenue split by year and product.

You need to transform the data to ensure that you can build the visuals. The solution must ensure that the columns are named appropriately for the data that they contain.

Which three actions should you perform in sequence? To answer, move the appropriate actions from the list of actions to the answer area and arrange them in the correct order.

Actions	Answer Area
Select Use Headers as First Row.	
Select Department and Product and Unpivot Other Columns .	(>)
Select Use First Rows as Headers.	
Rename the third column as Year and the fourth column as Revenue.	(<)
Select Department and Product and Unpivot Columns .	
Rename the third column as Revenue and the fourth column as Year.	

Answer:

Explanation:

Select Use First Row as Headers.

**Select Department and Product and
Unpivot Other Columns.**

**Rename the Attribute column to Year
and the Value column to Revenue.**

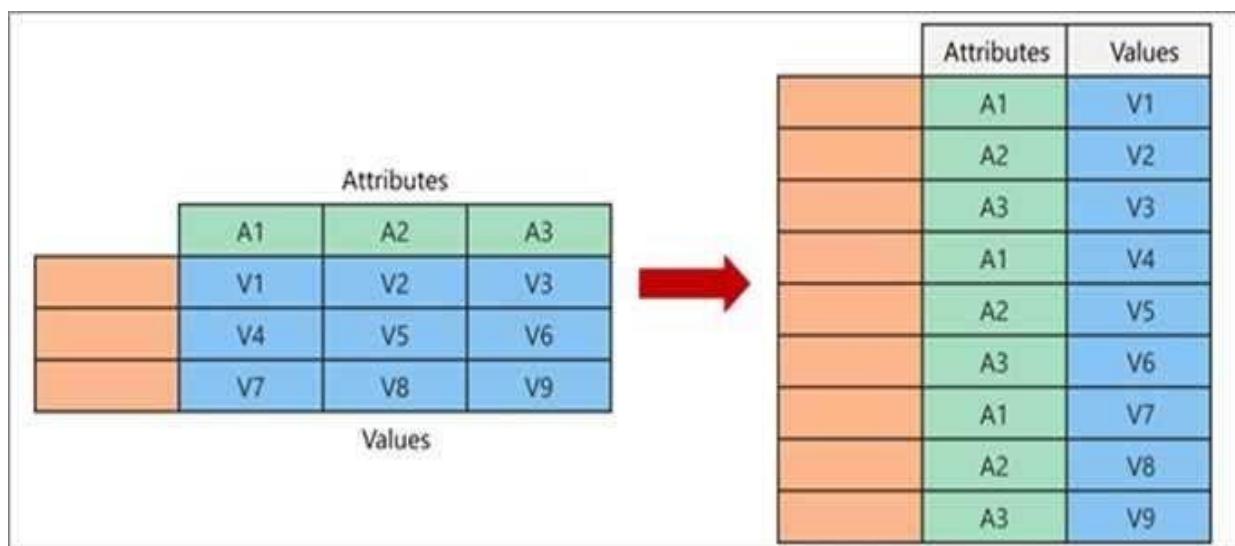
Step 1: Select Use Header as First Row.

Step 2: Select Department and Product and Unpivot Other Columns

Unpivot Other Columns: This command unpivots unselected columns. Use this command in a query when not all columns are known. New columns added during a refresh operation are also unpivoted.

Step 3: Rename the Attribute column to Year and the Value column to Revenue.

You might want to unpivot data, sometimes called flattening the data, to put it in a matrix format so that all similar values are in one column. This is necessary, for example, to create a chart or a report.



When you unpivot, you unpack the attribute-value pairs that represent an intersection point of the new columns and re-orient them into flattened columns:

Values (in blue on the left) are unpivoted into a new column (in blue on the right).

Attributes (in green on the left) are unpivoted into a new column (in green on the right) and duplicates are correspondingly mapped to the new Values column.

Reference:

<https://support.microsoft.com/en-us/office/unpivot-columns-power-query-0f7bad4b-9ea1-49c1-9d95-f588221c7098>

Question: 73

You import a large dataset to Power Query Editor.

You need to identify whether a column contains only unique values.

Which two Data Preview options can you use? Each correct answer presents a complete solution. NOTE: Each correct selection is worth one point

- A. Show whitespace
- B. Column distribution
- C. Column profile
- D. Column quality
- E. Monospaced

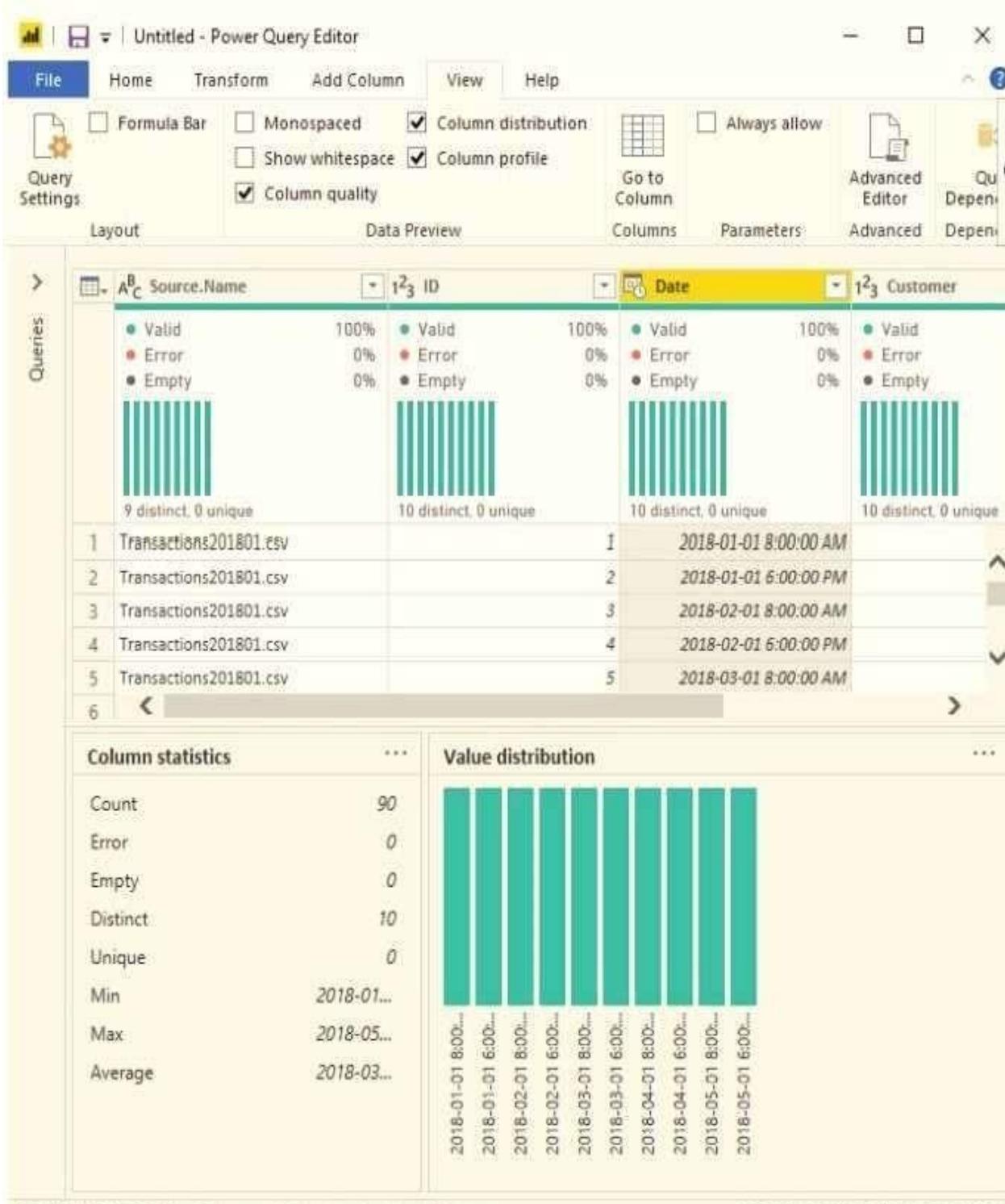
Answer: AD

Explanation:

Question: 74

HOTSPOT

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



5 COLUMNS, 90 ROWS Column profiling based on top 1000 rows

PREVIEW DOWNLOADED AT 11:45 AM

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.

NOTE: Each correct selection is worth one point.

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:

Explanation:

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

Box 1: 9
9 distinct CSV files.

Box 2: 10
10 distinct dates.

<https://pediaa.com/what-is-the-difference-between-unique-and-distinct-in-sql#:~:text=Unique%20and%20Distinct%20are%20two%20SQL%20constraints.,the%20records%20from%20a%20table.>

Question: 75

Your company has employees in 10 states.
The company recently decided to associate each state to one of the following three regions: East, West, and North.
You have a data model that contains employee information by state. The model does NOT include region

information.

You have a report that shows the employees by state.
You need to view the employees by region as quickly as possible. What should you do?

- A. Create a new aggregation that summarizes by employee.
- B. Create a new group on the state column and set the Group type to List.
- C. Create a new group on the state column and set the Group type to Bin.
- D. Create a new aggregation that summarizes by state.

Answer: B

Explanation:

<https://www.mssqltips.com/sqlservertip/4720/binning-and-grouping-data-with-power-bi/>

Question: 76

You have a query that returns the data shown in the following exhibit.

	A ^B _C student	A ^B _C classes
1	Mike A	Math,English,Art
2	Sam B	Physics
3	Kathy S	English, Math

You need to configure the query to display the data as shown in the following exhibit.

	A ^B _C student	A ^B _C classes
1	Mike A	Math
2	Mike A	English
3	Mike A	Art
4	Sam B	Physics
5	Kathy S	English
6	Kathy S	Math

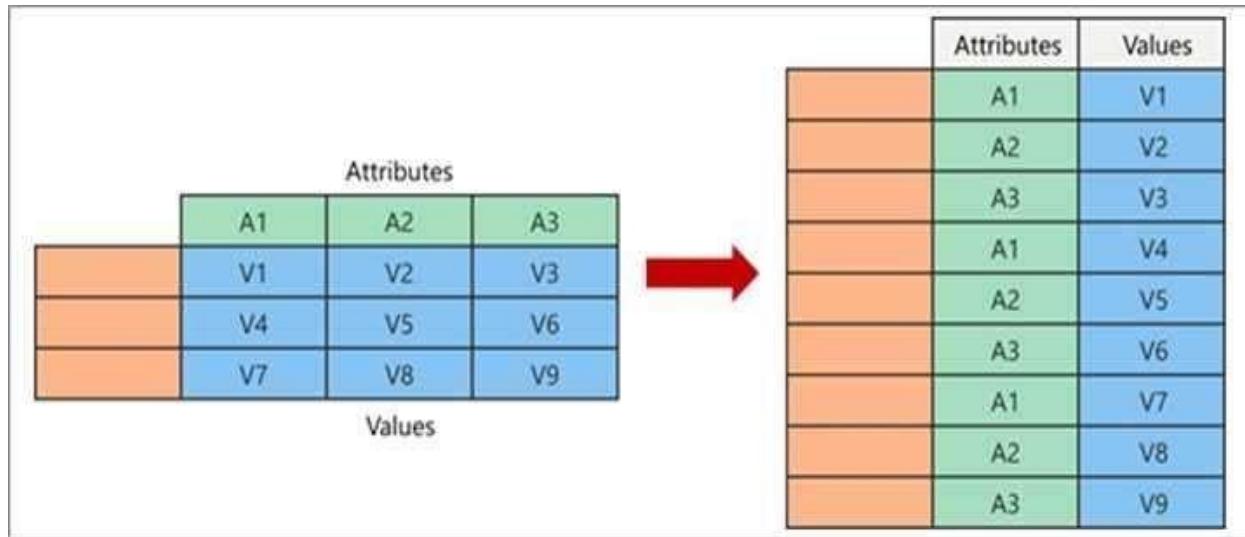
Which step should you use in the query?

- A. =Table.ExpandListColum(Table.TransformColumnns(Source, {"classes". Splitter.SplitTextByDelimiter(",", QuoteStyle.None), let itemType - (type nullable text) meta [Serialized.Text = true] in type {itemType}}), "classes")
- B. =Table.Unpivot(Source, {"classes"}, "Attribute", "Value")
- C. = Table.SplitColumn(Source, "classes". Splitter.SplitTextByDelimiterv",", QuoteStyle.None), {"classes.1"})
- D. = Table.SplitColumn(Source, "classes". Splitter.SplitTextByPositions({10}), {"classes.1"})

Answer: B

Explanation:

Power Query Unpivot columns: You might want to unpivot data, sometimes called flattening the data, to put it in a matrix format so that all similar values are in one column. This is necessary, for example, to create a chart or a report.

**Note:**

Syntax: Table.Unpivot(table as table, pivotColumns as list, attributeColumn as text, valueColumn as text) as table

Table.Unpivot translates a set of columns in a table into attribute-value pairs, combined with the rest of the values in each row.

Reference:

<https://docs.microsoft.com/en-us/power-query/unpivot-column>

<https://docs.microsoft.com/en-us/powerquery-m/table-unpivot>

Question: 77**DRAG DROP**

You are modeling data in table named SalesDetail by using Microsoft Power BI. You need to provide end users with access to the summary statistics about the SalesDetail data. The users require insights on the completeness of the data and the value distributions. Which three actions should you perform in sequence? To answer, move the appropriate actions from the list of actions to the answer area and arrange them in the correct order.

Actions	Answer Area
Specify the following query, then close and apply. -Table.Distinct(#"SalesDetail")	
Create a visual for the query table.	
Create a parameter that uses a query for the suggested values.	 
Create a query that uses Common Data Service as a data source.	
Specify the following query, then close and apply. -Table.Profile(#"SalesDetail")	
Create a blank query as a data source.	

Answer:

Explanation:

Create a blank query as a data source.

Specify the following query, then close and apply.
-Table.Profile(#"SalesDetail")

Create a visual for the query table.

Question: 78

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. 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

Explanation:

We have to separate date & time tables. Also, we don't need to put the time into the date table, because the time is repeated every day.
Split your DateTime column into a separate date & time columns in fact table, so that you can join the date to the date table & the time to the time table. The time need to be converted to the nearest round minute or second so that every time in your data corresponds to a row in your time table.

Reference:

<https://intellipaat.com/community/6461/how-to-include-time-in-date-hierarchy-in-power-bi>

Question: 79

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

Explanation:

Question: 80

You have the tables shown in the following table.

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? Each correct answer presents part of the

solution. NOTE: Each correct selection is worth one point.

- 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: BC

Explanation:

Question: 81

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: D

Explanation:

<https://docs.microsoft.com/en-us/stream/portal-embed-video>

<https://docs.microsoft.com/en-us/power-bi/create-reports/service-dashboard-add-widget#add-web-content>

Question: 82

You open a query in Power Query Editor.

You need to identify the percentage of empty values in each column as quickly as possible. Which Data Preview option should you select?

- A. Show whitespace

- B.Column profile
- C.Column distribution
- D.Column quality

Answer: D

Explanation:

Column quality: In this section, we can easily see valid, Error and Empty percentage of data values associated with the Selected table.

Note: In Power Query Editor, Under View tab in Data Preview Section we can see the following data profiling functionalities:

- Column quality
- Column distribution
- Column profile

Reference:

<https://community.powerbi.com/t5/Community-Blog/Data-Profiling-in-Power-BI-Power-BI-Update-April-2019/ba-p/674555>

Question: 83

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? Each correct answer presents part of the solution. NOTE: Each correct selection is worth one point.

- 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: CE

Explanation:

In Power query, the load preview by default is 1000 row. By default, the column quality also only looks at the first 1000 row. You can verify this by the status bar at the bottom of the Power query window. To change the profiling so it analyses the entire column of data, select the profiling status in the status bar. Then select Column profiling based on the entire data set. <https://theexcelclub.com/data-profiling-views-in-power-query-excel-and-power-bi/>

Question: 84

HOTSPOT

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.

NOTE: Each correct selection is worth one point.

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

Answer:

Explanation:

Box 1: Table.RemoveColumns

When you do “Remove Columns” Power Query uses the Table.RemoveColumns function

Box 2: List.Select

Get a list of

columns. Box 3:

Text.EndsWith

Question: 85

DRAG DROP

You are building a dataset from a JSON file that contains an array of documents.

You need to import attributes as columns from all the documents in the JSON file. The solution must ensure that date attributes can be used as date hierarchies in Microsoft Power BI reports.

Which three actions should you perform in sequence? To answer, move the appropriate actions from the list of actions to the answer area and arrange them in the correct order.

Actions	Answer Area
Expand the columns.	
Expand the records.	
Add columns that use data type conversions.	
Set the data types.	
Convert the list to a table.	

Answer:

Explanation:

- 1- Convert list to table
- 2- Expand Column
- 3- Set Date type

Here is an example: <https://youtu.be/B4kzyxnhQfI>

The definition of the function which expand columns:

<https://docs.microsoft.com/en-us/powerquery-m/table-expandrecordcolumn>

Question: 86

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

Explanation:

There are two primary ways of combining queries: merging and appending. When you have one or more columns that you'd like to add to another query, you merge the queries. When you have additional rows of data that you'd like to add to an existing query, you append the query.

Reference:

<https://docs.microsoft.com/en-us/power-bi/connect-data/desktop-shape-and-combine-data>

Question: 87

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

Explanation:

<https://docs.microsoft.com/en-us/learn/modules/create-manage-workspaces-power-bi/4-development-lifecycle-strategy>

Question: 88

You have a CSV file that contains user complaints. The file contains a column named Logged. Logged contains the date and time each compliant 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.

D18912E1457D5D1DDCBD40AB3BF70D5D

What should you do?

- A. Change the data type of the Logged column to Date.
- B. Apply a transform to extract the last 11 characters of the Logged column and set the data type of the new column to Date.
- 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

Explanation:

Question: 89

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

Explanation:

With Power BI Desktop, when you connect to your data source, it's always possible to import a copy of the data into the Power BI Desktop. For some data sources, an alternative approach is available: connect directly to the data source using DirectQuery.

DirectQuery: No data is imported or copied into Power BI Desktop. For relational sources, the selected tables and columns appear in the Fields list. For multi-dimensional sources like SAP Business Warehouse, the dimensions and measures of the selected cube appear in the Fields list. As you create or interact with a visualization, Power BI Desktop queries the underlying data source, so you're always viewing current data.

Reference:

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

Question: 90

You have a Microsoft Power BI data model that contains three tables named Orders, Date, and City. There is a one-to-many relationship between Date and Orders and between City and Orders.

The model contains two row-level security (RLS) roles named Role1 and Role2. Role1 contains the following filter.

City[State Province] =

"Kentucky" Role2 contains the following filter. Date[Calendar

Year] = 2020

If a user is a member of both Role1 and Role2, what data will they see in a report that uses the model?

- A. The user will see data for which the State Province value is Kentucky and the Calendar Year is 2020.
- B. The user will see data for which the State Province value is Kentucky or the Calendar Year is 2020.
- C. The user will see only data for which the State Province value is Kentucky.
- D. The user will receive an error and will not be able to see the data in the report.

Answer: B

Explanation:

When a report user is assigned to multiple roles, RLS filters become additive. It means report users can see table rows that represent the union of those filters.

Reference:

<https://docs.microsoft.com/en-us/power-bi/guidance/rls-guidance>

Question: 91

HOTSPOT

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
	TransactionID
Affiliate	AffiliateID
	Name

You need to develop a measure to support the visual.

How should you complete the DAX expression? To answer, select the appropriate options in the answer area.

NOTE: Each correct selection is worth one point.

Revenue Last 50 Transactions =

The screenshot shows the Power BI DAX formula editor with the following steps:

- Step 1:** The formula starts with a CALCULATE function, followed by a SUMX function, and then a TOPN function. The argument for TOPN is '(50, Transactions, Transactions'.
- Step 2:** The formula is expanded to show the inner SUMX function. The argument for SUMX is '(Transactions[Amount]),' preceded by another CALCULATE function.
- Step 3:** The formula is expanded again to show the inner SUM function. The argument for SUM is 'DESC)'.
- Step 4:** The formula is fully expanded to show all columns from the 'Transactions' table: TransactionID, Amount, ItemsOrdered, and TransactionDate.

```

CALCULATE
SUMX
TOPN

CALCULATE
SUMX

CALCULATE
TOPN

DESC)

)
  
```

Answer:

Explanation:

Box 1: CALCULATE

Start with CALCULATE and use a SUMX.

CALCULATE evaluates an expression in a modified filter

context. Box 2: SUM

Box 3: TOPN

TOPN returns the top N rows of the specified table.

Box 4: [TransactionDate]

TOPN Syntax: TOPN(<n_value>, <table>, <orderBy_expression>, [<order>], <orderBy_expression>, [<order>]]...])

The orderBy_expression: Any DAX expression where the result value is used to sort the table and it is evaluated for each row of table.

Reference:

<https://docs.microsoft.com/en-us/dax/topn-function-dax>

Question: 92

HOTSPOT

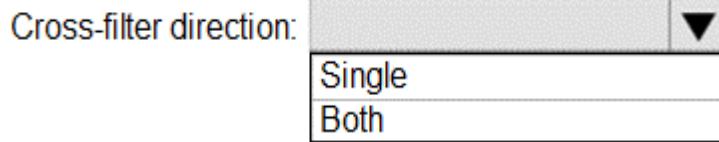
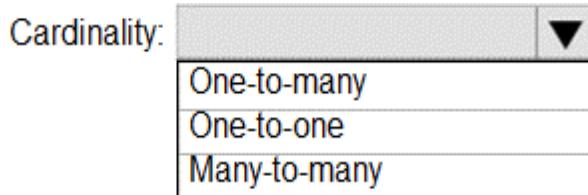
You are creating a Microsoft Power BI data model that has the tables shown in the following table.

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

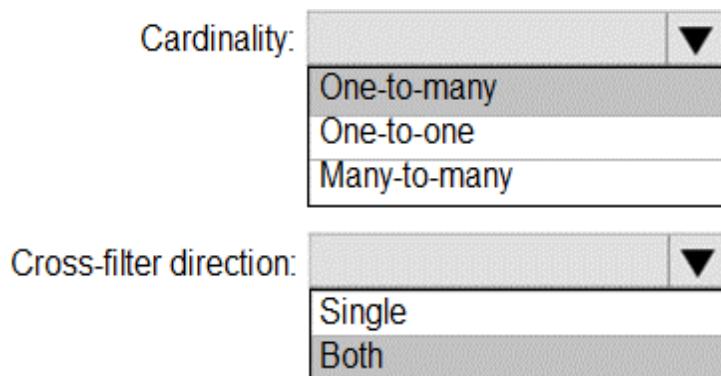
The Products table is related to the ProductCategory table through the ProductCategoryID column. You need to ensure that you can analyze sales by product category.

How should you configure the relationships from Products to ProductCategory? To answer, select the appropriate options in the answer area.

NOTE: Each correct selection is worth one point.

**Answer:**

Explanation:



Box 1: One-to-many

Box 2: Both

For One-to-many relationships, the cross filter direction is always from the "one" side, and optionally from the "many" side (bi-directional).

Note:

Cardinality type	Cross filter options
One-to-many (or Many-to-one)	Single Both
One-to-one	Both
Many-to-many	Single (Table1 to Table2) Single (Table2 to Table1) Both

Reference:

<https://docs.microsoft.com/en-us/power-bi/transform-model/desktop-relationships-understand>

Question: 93

DRAG DROP

You have a Microsoft Power BI data model that contains three tables named Sales, Product, and Date.

The Sales table has an existing measure named [Total Sales] that sums the total sales from the Sales table.

You need to write a calculation that returns the percentage of total sales that a selected ProductCategoryName value represents. The calculation must respect any slicers on ProductCategoryName and must show the percentage of visible total sales. For example, if there are four ProductCategoryName values, and a user filters one out, a table showing ProductCategoryName and the calculation must sum up to 100 percent.

How should you complete the calculation? To answer, drag the appropriate values to the correct targets. Each value may be used once, more than once, or not at all. You may need to drag the split bar between panes or scroll to view content.

NOTE: Each correct selection is worth one point.

Values**Answer Area**

ALL

Product Category % of Total 2 =

ALLSELECTED

([Total Sales],

CALCULATE

([Total Sales] ,

CALCULATETABLE

(

CURRENTGROUP

Product [ProductCategoryName])))

DIVIDE

SUMMARIZE

TOPN

Answer:

Explanation:

Divide, Calculate, AllSelected.

Reference:

<https://docs.microsoft.com/en-us/dax/allselected-function-dax>

Question: 94

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

Explanation:

Only one relationship can be active.

Note: If you query two or more tables at the same time, when the data is loaded, Power BI Desktop attempts to find and create relationships for you. The relationship options Cardinality, Cross filter direction, and Make this relationship active are automatically set.

Reference:

<https://docs.microsoft.com/en-us/power-bi/transform-model/desktop-create-and-manage-relationships>

Question: 95

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 scenario, you will NOT be able to return to it. As a result, these questions will not appear in the review screen.

You have a clustered bar chart that contains a measure named Salary as the value and a field named

Employee as the axis. Salary is present in the data as numerical amount representing US dollars. You need to create a reference line to show which employees are above the median salary.

Solution: You create a constant line and set the value to .5. Does this meet the goal?

- A. Yes
- B. No

Answer: B

Explanation:

Instead create a percentile line by using the Salary measure and set the percentile to 50%.

Note: The 50th percentile is also known as the median or middle value where 50 percent of observations fall below.

Reference:

https://dash-intel.com/powerbi/statistical_functions_percentile.php

Question: 96

You need to create a visualization that compares revenue and cost over time. Which type of visualization should you use?

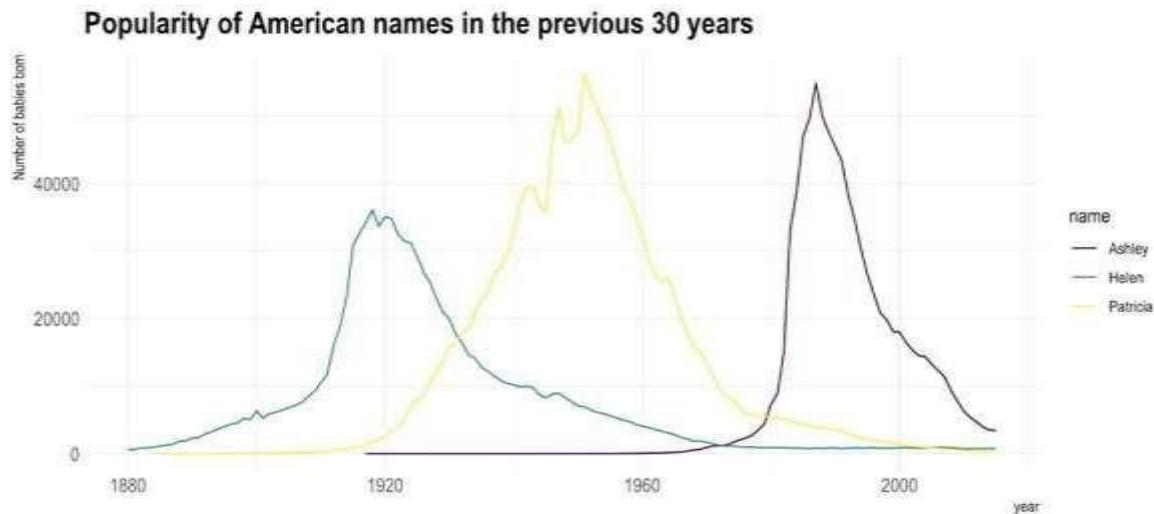
- A. stacked area chart
- B. donut chart
- C. line chart
- D. waterfall chart

Answer: C

Explanation:

A line chart or line graph displays the evolution of one or several numeric variables. Data points are connected by straight line segments. A line chart is often used to visualize a trend in data over intervals of time – a time series – thus the line is often drawn chronologically.

Example:

**Incorrect Answers:**

A: Stacked area charts are not appropriate to study the evolution of each individual group: it is very hard to subtract the height of other groups at each time point.

Note: A stacked area chart is the extension of a basic area chart. It displays the evolution of the value of several groups on the same graphic. The values of each group are displayed on top of each other, what allows to check on the same figure the evolution of both the total of a numeric variable, and the importance of each group.

Reference:

<https://www.data-to-viz.com/graph/line.html>

Question: 97

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

Explanation:

When you create a bookmark, the following elements are saved with the bookmark: - The current page - Filters - Slicers, including slicer type (for example, dropdown or list) and slicer state - Visual selection state (such as cross-highlight filters) - Sort order - Drill location - Visibility of an object (by using the Selection pane) - The focus or Spotlight modes of any visible object

Question: 98

You use an R visual to produce a map of 500,000 customers. You include the values of CustomerID, Latitude, and Longitude in the fields sent to the visual. Each customer ID is unique.

In powerbi.com, when users load the visual, they only see some of the customers. What is the cause of the issue?

- A. The visual was built by using a different version of R.
- B. The data comes from a Microsoft SQL Server source.
- C. The data is deduplicated.
- D. Too many records were sent to the visual.

Answer: D

Explanation:

R visuals in the Power BI service have a few limitations including:

Data size limitations – data used by the R visual for plotting is limited to 150,000 rows. If more than 150,000 rows are selected, only the top 150,000 rows are used and a message is displayed on the image. Additionally, the input data has a limit of 250 MB.

Reference:

<https://docs.microsoft.com/en-us/power-bi/visuals/service-r-visuals>

Question: 99

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 is possible way 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

Explanation:

Reference:

<https://docs.microsoft.com/en-us/power-bi/create-reports/desktop-custom-tooltips>

<https://technovids.com/power-bi-filters/>

Question: 100

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

Explanation:

HIGHLIGHT as the question required us to "you see which portion of the total sales for the month belongs to the customer segment" -- in order to see WHICH portion, you need to still see the whole visual, highlight is most appropriate. If the requirement stated to ONLY SEE THE PORTION IT RELATES TO then filter would be appropriate.

Question: 101

You have a dashboard that contains tiles pinned from a single report as shown in the Original Dashboard exhibit. (Click the Original Dashboard tab.)

Ask a question about your data

Total Defect Quantity

33M

Total Downtime Minutes

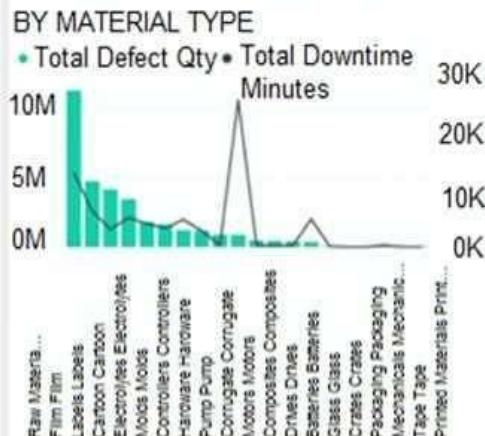
77KTotal Defect Qty
WITH NO IMPACT**17M**Total Defect Qty
WITH IMPACT

Total Defect Reports BY PLANT, DEFECT TYPE

Defect Type • Rejected • Impact • No impact



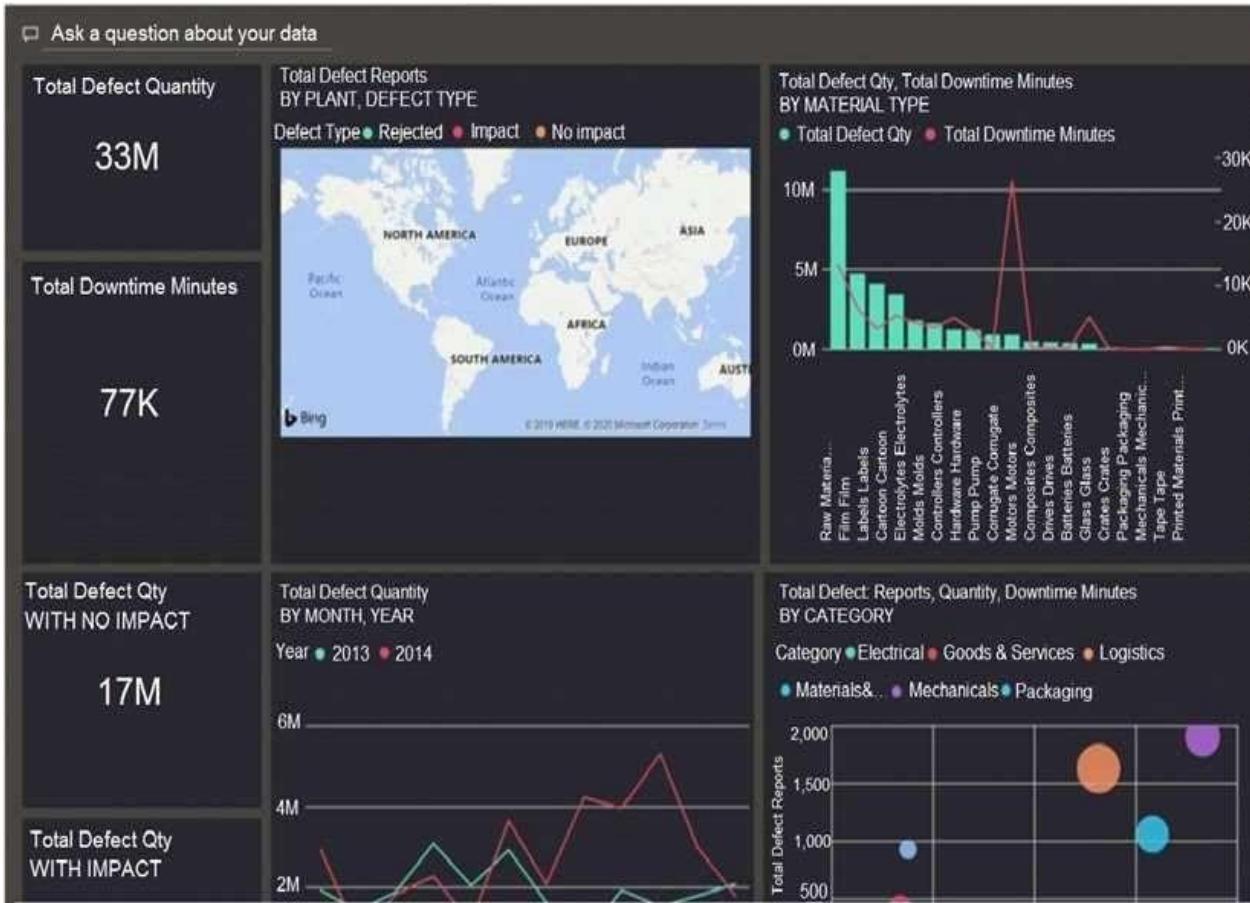
Total Defect Qty, Total Downtime Minutes BY MATERIAL TYPE



Total Defect Reports, Quantity, Downtime Minutes BY CATEGORY

Category • Electrical • Goods & Services • Logistics • Materials...
• Mechanics • Packaging

You need to modify the dashboard to appear as shown in the Modified Dashboard exhibit.
(Click the Modified Dashboard tab.)



What should you do?

- A. Edit the details of each tile.
- B. Change the report theme.
- C. Change the dashboard theme.
- D. Create a custom CSS file.

Answer: C

Explanation:

<https://docs.microsoft.com/en-us/power-bi/create-reports/service-dashboard-themes#how-dashboard-themes-work>

Question: 102

DRAG DROP

You are using existing reports to build a dashboard that will be viewed frequently in portrait mode on mobile phones.

You need to build the dashboard.

Which four actions should you perform in sequence? To answer, move the appropriate actions from

the list of actions to the answer area and arrange them in the correct order.

Actions	Answer Area
Pin items from the reports to the dashboard.	
Rearrange, resize, or remove items from the phone view.	
Change the dashboard view to Phone view .	
Open the dashboard.	
Create a phone layout for the existing reports.	 

Answer:

Explanation:

1. Pin items from report to Dashboard.
2. Open Dashboard.
3. Change the dashboard view to Phone view.
4. Rearrange, resize the visuals.

Question: 103

HOTSPOT

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

NOTE: Each correct selection is worth one point.

Visualization:

- A column chart of Quantity Ordered and Unit Price by year
- A line chart of Quantity Ordered and Unit Price by item
- A scatter plot of Quantity Ordered and Unit Price by item

Feature:

- Automatically find clusters
- Explain the decrease
- Find where the distribution is different

Explanation:

Answer:

Visualization:

- A column chart of Quantity Ordered and Unit Price by year
- A line chart of Quantity Ordered and Unit Price by item
- A scatter plot of Quantity Ordered and Unit Price by item

Feature:

- Automatically find clusters
- Explain the decrease
- Find where the distribution is different

Box 1: A scatter plot...

A scatter chart always has two value axes to show: one set of numerical data along a horizontal axis and another set of numerical values along a vertical axis. The chart displays points at the intersection of an x and y numerical value, combining these values into single data points. Power BI may distribute these data points evenly or unevenly across the horizontal axis. It depends on the data the chart represents.

Box 2: Automatically find clusters

Scatter charts are a great choice to show patterns in large sets of data, for example by showing linear or non-linear trends, clusters, and outliers.

Reference:

<https://docs.microsoft.com/en-us/power-bi/visuals/power-bi-visualization-scatter>

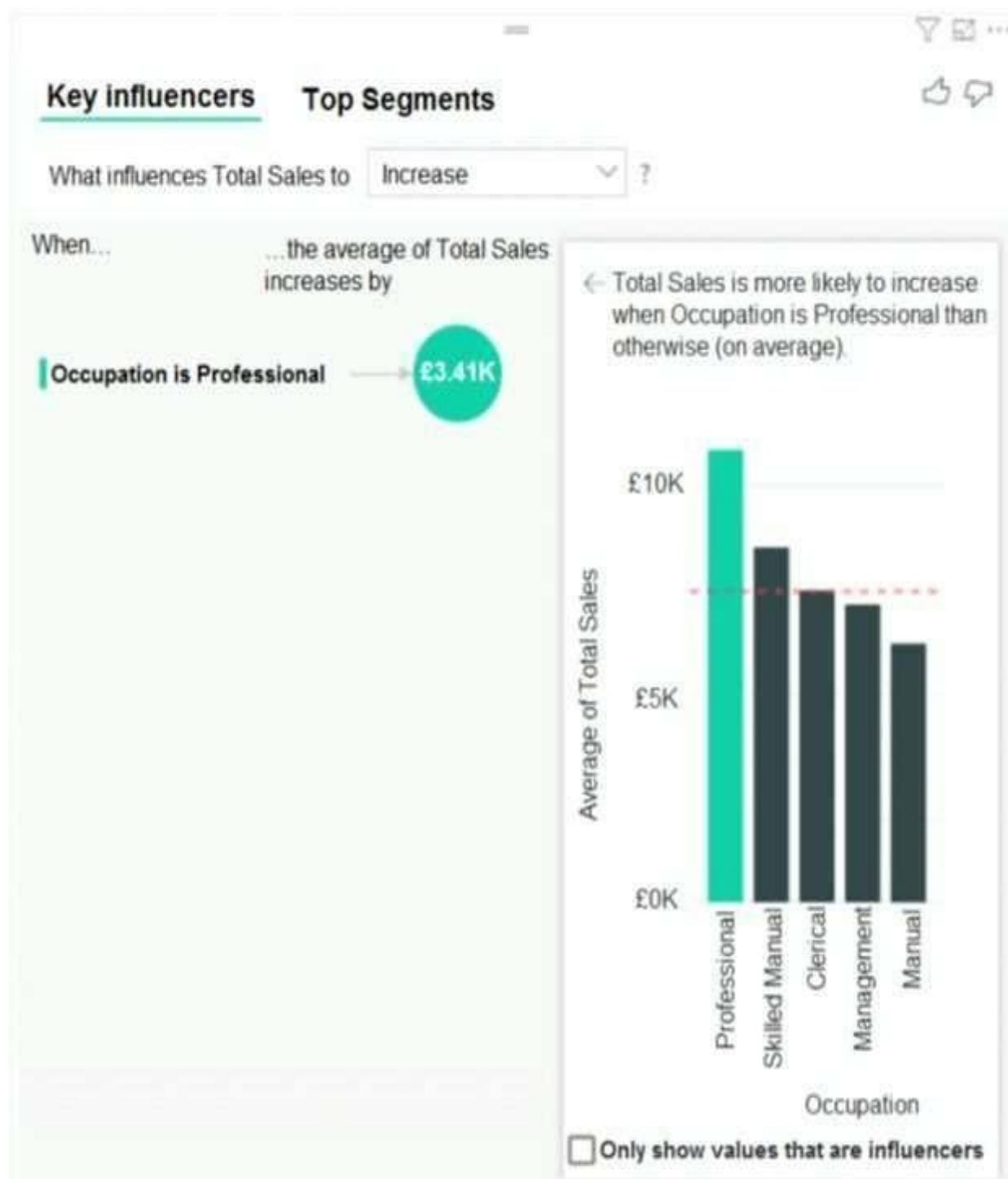
Question: 104

HOTSPOT

You have a table that contains the following three columns:

City
Total
Sales
Occupatio
n

You need to create a key influencers visualization as shown in the exhibit. (Click the Exhibit tab.)



How should you configure the visualization? To answer, select the appropriate options in the answer area.

NOTE: Each correct selection is worth one point.

Analyze:	
	City Occupation Total Sales

Explain by:	
	City Occupation Total Sales

Expand by:	
	City Occupation Total Sales

Answer:

Explanation:

Analyze:	
	City Occupation Total Sales

Explain by:	
	City Occupation Total Sales

Expand by:	
	City Occupation Total Sales

Box 1: Total Sales

Box 2: Occupation

Box 3: City

You can use Expand By to add fields you want to use for setting the level of the analysis without looking for new influencers.

Reference:

<https://docs.microsoft.com/en-us/power-bi/visuals/power-bi-visualization-influencers>

Question: 105

You have the dataset shown in the following exhibit.

The screenshot shows a table with two columns: 'City' and 'Sales Profit'. The table lists 15 cities along with their total sales and profit. The last row is a summary 'Total'.

City	Sales Profit
Abbottsburg	\$173,947
Absecon	\$129,358
Accomac	\$157,768
Aceitunas	\$119,283
Airport Drive	\$162,500
Akhiok	\$259,554
Alcester	\$127,040
Alden Bridge	\$152,138
Alstead	\$106,147
Amado	\$136,718
Amanda Park	\$117,444
Andrix	\$130,710
Annamoriah	\$139,499
Antares	\$147,562
Antonio	\$113,056
Total	\$85,729,181

You need to ensure that the visual shows only the 10 cities that have the highest

sales profit. What should you do?

- A. Add a Top N filter to the visual.
- B. Configure the Sales Profit measure to use the RANKX function.
- C. Add a calculated column to the table that uses the TOPN function. In the visual, replace Sales Profit with the calculated column.
- D. Add a calculated column to the table that returns the city name if the city is in the top 10, otherwise the calculated column will return "Not in Top 10". In the visual, replace Sales Profit with the calculated column.

D18912E1457D5D1DDCBD40AB3BF70D5D

Answer: A

Explanation:

Power BI Top N Filters are useful to display the top performing records, and Bottom N filters are helpful to display the least performing records. For example, we can display top or bottom 10 products by orders or sales.

Note:

Select the Column you want to display the Top Sales

Profit Then change the Filter Type of that Column

to Top N

Fill in Top / Bottom number field

And lastly drag to the By Value field your Sales Profit

Reference:

<https://www.tutorialgateway.org/power-bi-top-10-filters/>

Question: 106

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 scenario, you will NOT be able to return to it. As a result, these questions will not appear in the review screen.

You have a clustered bar chart that contains a measure named Salary as the value and a field named Employee as the axis. Salary is present in the data as numerical amount representing US dollars.

You need to create a reference line to show which employees are above the median salary.

Solution: You create an average line by using the Salary measure.

Does this meet the goal?

A. Yes

B. No

Answer: B

Explanation:

Instead create a percentile line by using the Salary measure and set the percentile to 50%.

Note: The 50th percentile is also known as the median or middle value where 50 percent of

observations fall below.

Reference:

https://dash-intel.com/powerbi/statistical_functions_percentile.php

Question: 107

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 scenario, you will NOT be able to return to it. As a result, these questions will not appear in the review screen.

You have a clustered bar chart that contains a measure named Salary as the value and a field named Employee as the axis. Salary is present in the data as numerical amount representing US dollars.

You need to create a reference line to show which employees are above the median salary. Solution: You create a percentile line by using the Salary measure and set the percentile to 50%. Does this meet the goal?

- A. Yes
- B. No

Answer: A

Explanation:

The 50th percentile is also known as the median or middle value where 50 percent of observations fall below.

Reference:

https://dash-intel.com/powerbi/statistical_functions_percentile.php

Question: 108

DRAG DROP

You have a query named Customer that imports CSV files from a data lake. The query contains 500 rows as shown in the exhibit. (Click the Exhibit tab.)

	ABC Source.Name	123 Customer ID	Modified Date	ABC Customer	ABC Category
	• Valid 100% • Error 0% • Empty 0%				
1	Customer20200104.csv	1	1/1/2020 12:00:00 AM	Tailspin Toys (Head Office)	Novelty Shop
2	Customer20200104.csv	2	1/1/2020 12:00:00 AM	Tailspin Toys (Sylvanite, MT)	Novelty Shop
3	Customer20200104.csv	3	1/1/2020 12:00:00 AM	Tailspin Toys (Peeples Valley, AZ)	Novelty Shop
4	Customer20200104.csv	4	1/4/2020 12:00:00 AM	Tailspin Toys (Medicine Lodge, KS)	Novelty Shop
5	Customer20200104.csv	5	1/4/2020 12:00:00 AM	Tailspin Toys (Gasport, NY)	Novelty Shop
6	Customer20200104.csv	6	1/4/2020 12:00:00 AM	Tailspin Toys (Jessie, ND)	Novelty Shop
7	Customer20200104.csv	7	1/4/2020 12:00:00 AM	Tailspin Toys (Frankewing, TN)	Novelty Shop
8	Customer20200104.csv	8	1/4/2020 12:00:00 AM	Tailspin Toys (Bow Mar, CO)	Novelty Shop
9	Customer20200104.csv	9	1/4/2020 12:00:00 AM	Tailspin Toys (Netcong, NJ)	Novelty Shop
10	Customer20200104.csv	10	1/4/2020 12:00:00 AM	Tailspin Toys (Wimbledon, ND)	Novelty Shop
11	Customer20200112.csv	1	1/12/2020 12:00:00 AM	Tailspin Toys (Head Office)	Novelty Shop
12	Customer20200112.csv	2	1/12/2020 12:00:00 AM	Tailspin Toys (Sylvanite, MT)	Novelty Shop
13	Customer20200112.csv	3	1/12/2020 12:00:00 AM	Tailspin Toys (Peeples Valley, AZ)	Novelty Shop
14	Customer20200112.csv	4	1/12/2020 12:00:00 AM	Tailspin Toys (Medicine Lodge, KS)	Novelty Shop
15	Customer20200112.csv	5	1/12/2020 12:00:00 AM	Tailspin Toys (Gasport, NY)	Novelty Shop
16	Customer20200112.csv	2	1/22/2020 12:00:00 AM	Tailspin Toys (Sylvanite, MT)	Novelty Shop
17	Customer20200112.csv	7	1/22/2020 12:00:00 AM	Tailspin Toys (Frankewing, TN)	Novelty Shop
18	Customer20200112.csv	8	1/22/2020 12:00:00 AM	Tailspin Toys (Bow Mar, CO)	Novelty Shop
19	Customer20200112.csv	9	1/22/2020 12:00:00 AM	Tailspin Toys (Netcong, NJ)	Novelty Shop
20	Customer20200112.csv	10	1/22/2020 12:00:00 AM	Tailspin Toys (Wimbledon, ND)	Novelty Shop

Each file contains deltas of any new or modified rows from each load to the data lake.
 Multiple files can have the same customer ID.

You need to keep only the last modified row for each customer ID.

Which three actions should you perform in sequence? To answer, move the appropriate actions from the list of actions to the answer area and arrange them in the correct order.

Actions	Answer Area
Filter the Customer query on Modified Date is Latest.	
Merge the CustomerGrouped query into the Customer query based on Customer ID and Modified Date by using a left outer join.	 
Remove duplicates in the Customer ID column.	
Duplicate the Customer query and name the new query CustomerGrouped.	
Group the CustomerGrouped query by Customer ID and output the max Modified Date value into a column named Modified Date.	
Merge the two queries based on Customer ID and Modified Date by using an inner join.	

Answer:

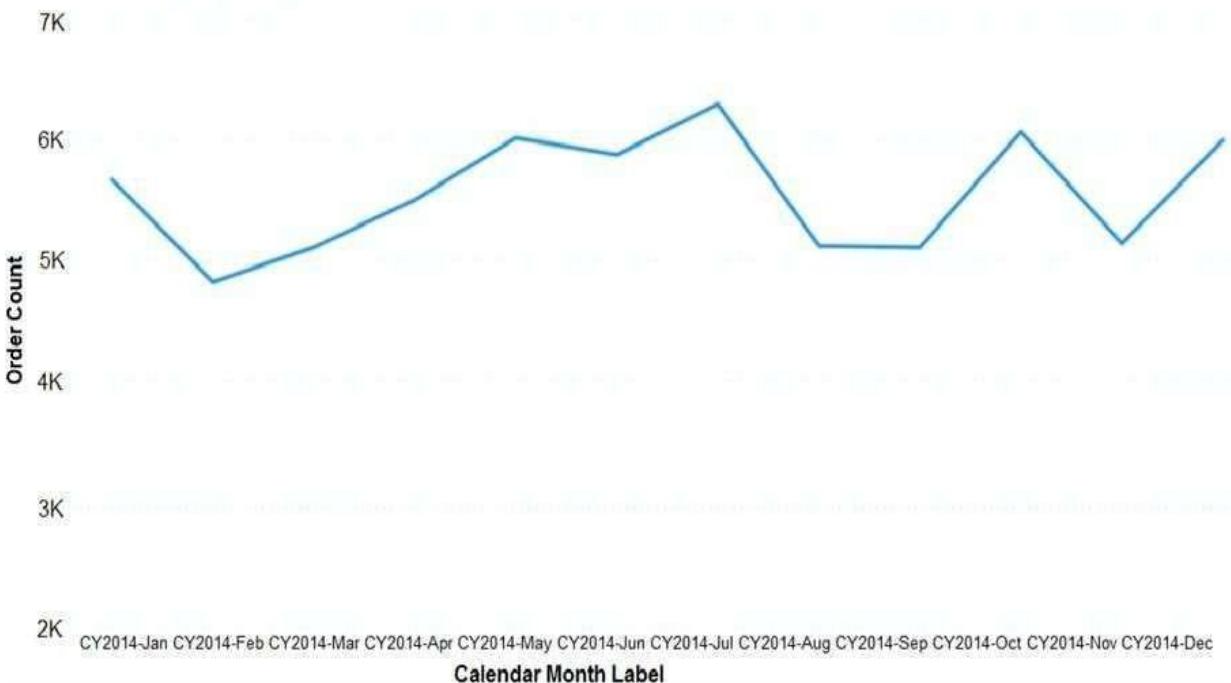
Explanation:

- 1) Duplicate Customer query
- 2) Group by CustId by Max ModifiedDate (only 2 columns to keep)
- 3) Merge two queries on CustId and ModifiedDate inner join (to retrieve other customer informations related to latest Date)

Question: 109

DRAG DROP

You have the line chart shown in the exhibit. (Click the Exhibit tab.)

Order Count by Month, 2014

You need to modify the chart to meet the following requirements:

Identify months that have order counts above the mean. Display the mean monthly order count.

Which three actions should you perform in sequence? To answer, move the appropriate actions from the list of actions to the answer area and arrange them in the correct order.

Actions**Answer Area**

Create a 12-month rolling average quick measure and add the measure to the line chart value.

From the Analytics pane, add a Median line.



Select the line chart.



From the Analytics pane, add an Average line.



Turn on data labels for the new line.

Answer:

Explanation:

1. Select the line chart
2. Add the average line

3. Turn on Data Label

Question: 110

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 scenario, you will NOT be able to return to it. As a result, these questions will not appear in the review screen.

You have several reports and dashboards in a workspace.

You need to grant all organizational users read access to a dashboard and several reports.

Solution: You create an Azure Active Directory group that contains all the users. You share each report and dashboard to the group.

Does this meet the goal?

- A. Yes
- B. No

Answer: A

Explanation:

Statements and questions are tricky and confusing. When the access is granted for the group (all users) for ALL (each) dashboards and ALL (each) reports in the workspace, then they will have read access to the specific (A, one) Dashboard and several reports, because they are part of all dashboards and reports. There is no statement, that for the other dashboards (except the one) and the other reports (except the several) that access must be prevented. They are also accessible (maybe it is not desired but not stated here).

Question: 111

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 scenario, you will NOT be able to return to it. As a result, these questions will not appear in the review screen.

You have several reports and dashboards in a workspace.

You need to grant all organizational users read access to a dashboard and several reports. Solution: You assign all the users the Viewer role to the workspace.

Does this meet the goal?

- A. Yes
- B. No

Answer: A

Explanation:

The Viewer role gives a read-only experience to its users. They can view dashboards, reports, or workbooks in the workspace, but can't browse the datasets or dataflows. Use the Viewer role wherever you would previously use a classic workspace set to "Members can only view Power BI content".

Reference: <https://powerbi.microsoft.com/en-us/blog/announcing-the-new-viewer-role-for-power-bi-workspaces/>

Question: 112

You publish a Microsoft Power BI dataset to powerbi.com. The dataset appends data from an on-premises Oracle database and an Azure SQL database by using one query.

You have admin access to the workspace and permission to use an existing On-premises data gateway for which the Oracle data source is already configured. You need to ensure that the data is updated every morning. The solution must minimize configuration effort.

Which two actions should you perform when you configure scheduled refresh? Each correct answer presents part of the solution.

NOTE: Each correct selection is worth one point.

- A. Configure the dataset to use the existing On-premises data gateway.
- B. Deploy an On-premises data gateway in personal mode.
- C. Set the refresh frequency to Daily.
- D. Configure the dataset to use the personal gateway.

Answer: AC

Explanation:

<https://docs.microsoft.com/en-us/power-bi/connect-data/service-gateway-personal-mode>

Question: 113

You need to provide a user with the ability to add members to a workspace. The solution must use the principle of least privilege.

Which role should you assign to the user?

- A. Viewer
- B. Contributor
- C. Member
- D. Admin

Answer: C

Explanation:

A Member can add members or others with lower

permissions. Note:

Capability	Admin	Member	Contributor	Viewer
Update and delete the workspace.	✓			
Add/remove people, including other admins.	✓			
Allow Contributors to update the app for the workspace	✓			
Add members or others with lower permissions.	✓	✓		

Question: 114

You create a dataset sourced from dozens of flat files in Azure Blob storage. The dataset uses incremental refresh.

From powerbi.com, you deploy the dataset and several related reports to Microsoft Power BI Premium capacity.

You discover that the dataset refresh fails after the refresh runs out of resources. What is a possible cause of the issue?

- A. Query folding is not occurring.
- B. You selected Only refresh complete periods.
- C. The data type of the column used to partition the data changed.
- D. A filter is missing on the report.

Answer: A

Explanation:

The Power BI service partitions data based on date range. This is what enables only certain partitions to be refreshed incrementally. To make this work, the partition filter conditions are pushed down to the source system by including them in the queries. Using Power Query terminology, this is called “query folding”. It is not recommended that incremental refresh is used when the required query folding cannot take place.

Reference:

<https://powerbi.microsoft.com/en-us/blog/incremental-refresh-query-folding/>

Question: 115

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 scenario, you will NOT be able to return to it. As a result, these questions will not appear in the review screen.

You have several reports and dashboards in a workspace.

You need to grant all organizational users read access to a dashboard and several reports. Solution: You publish an app to the entire organization.

Does this meet the goal?

- A. Yes
- B. No

Answer: A**Explanation:**

<https://docs.microsoft.com/es-es/power-bi/collaborate-share/service-create-distribute-apps>

Question: 116

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

Explanation:

DirectQuery: No data is imported or copied into Power BI Desktop.

Import: The selected tables and columns are imported into Power BI Desktop. As you create or interact with a visualization, Power BI Desktop uses the imported data.

Benefits of using DirectQuery

There are a few benefits to using DirectQuery:

DirectQuery lets you build visualizations over very large datasets, where it would otherwise be unfeasible to first import all the data with pre-aggregation.

Underlying data changes can require a refresh of data. For some reports, the need to display current data can require large data transfers, making reimporting data unfeasible. By contrast, DirectQuery reports always use current data.

The 1-GB dataset limitation doesn't apply to

DirectQuery. Reference:

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

Question: 117

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 are modeling data by using Microsoft Power BI. Part of the data model is a large Microsoft SQL Server table named Order that has more than 100 million records.

During the development process, you need to import a sample of the data from the Order table. Solution: From Power Query Editor, you import the table and then add a filter step to the query. Does this meet the goal?

- A. Yes
- B. No

Answer: A

Explanation:

Question: 118

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 are modeling data by using Microsoft Power BI. Part of the data model is a large Microsoft SQL Server table named Order that has more than 100 million records.

During the development process, you need to import a sample of the data from the Order table. Solution: You add a WHERE clause to the SQL statement.

Does this meet the goal?

- A. Yes
- B. No

Answer: A

Explanation:

The WHERE clause has its effects before the data is

imported. Reference:

<https://docs.microsoft.com/en-us/power-bi/connect-data/service-gateway-sql-tutorial>

Question: 119

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 create a parameter named DataSourceExcel that holds the file name and location of a Microsoft Excel data source.

You need to update the query to reference the parameter instead of multiple hard-coded copies of the location within each query definition.

Solution: You modify the source step of the queries to use DataSourceExcel as the file path. Does this meet the goal?

- A. Yes
- B. No

Answer: A

Explanation:

Parameterising a Data Source could be used in many different use cases. From connecting to different data sources defined in Query Parameters to load different combinations of columns.

Reference:

<https://www.biinsight.com/power-bi-desktop-query-parameters-part-1/>

Question: 120

HOTSPOT

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

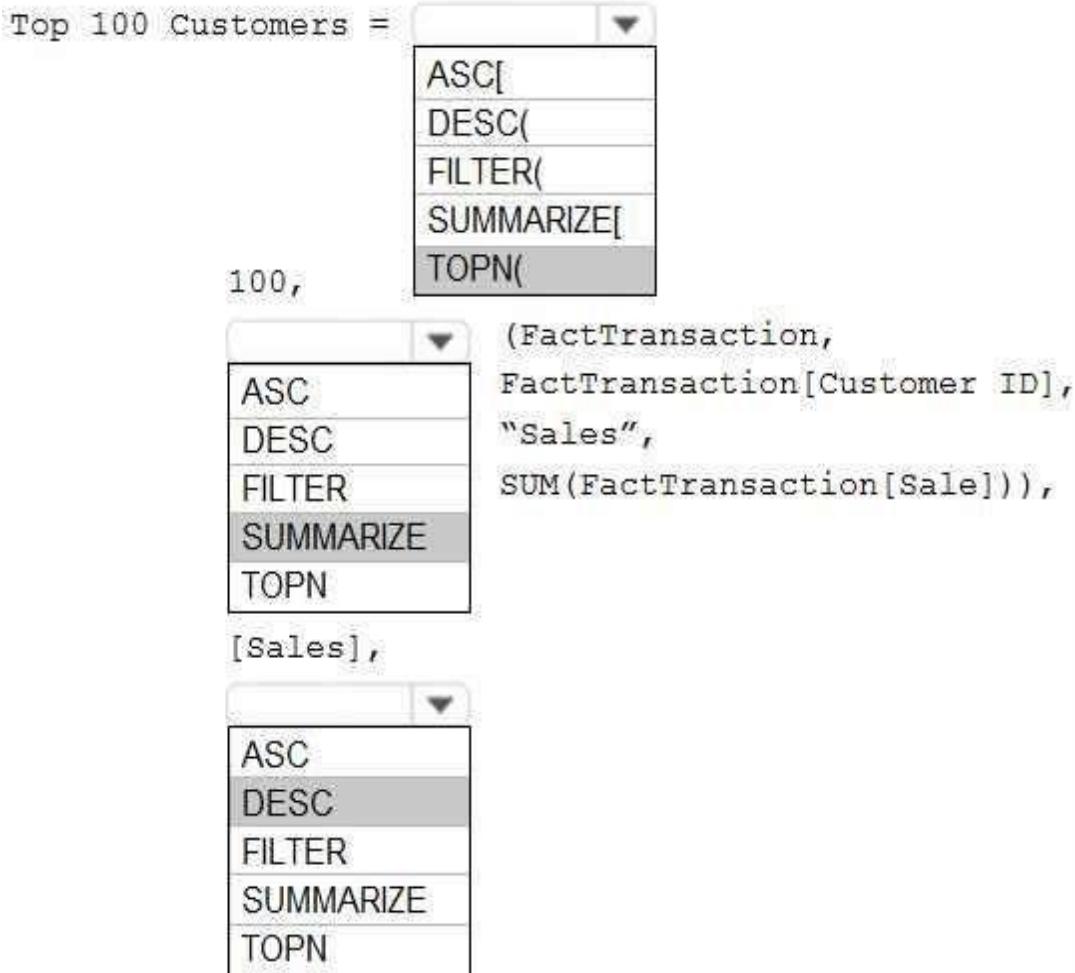
NOTE: Each correct selection is worth one point.

Top 100 Customers =

```
ASC[  
DESC(  
FILTER(  
SUMMARIZE[  
TOPN(  
  
(FactTransaction,  
FactTransaction[Customer ID],  
"Sales",  
SUM(FactTransaction[Sale])),  
  
[Sales],  
  
ASC  
DESC  
FILTER  
SUMMARIZE  
TOPN
```

Explanation:

Answer:

**Box 1: TOPN**

TOPN returns the top N rows of the specified table.

Box 2: SUMMARIZE

SUMMARIZE returns a summary table for the requested totals over a set of groups.

Box 3: DESC

Sort in descending order.

It is last in the TOPN

command. TOPN syntax:

TOPN(<n_value>, <table>, <orderBy_expression>, [<order>[, <orderBy_expression>, [<order>]]...])

Reference:

<https://docs.microsoft.com/en-us/dax/topn-function-dax>

<https://docs.microsoft.com/en-us/dax/summarize-function-dax>

Question: 121

HOTSPOT

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? To answer, select the appropriate options in the answer area. NOTE: Each correct selection is worth one point.

Cardinality:

Many-to-many
Many-to-one
One-to-many
One-to-one

Cross-filter direction:

Both
Single

Answer:

Explanation:

Cardinality:

Many-to-many
Many-to-one
One-to-many
One-to-one

Cross-filter direction:

Both
Single

Box 1: One-to-many

A customer can have many invoices within one month.

Box 2: Single

For One-to-many relationships, the cross filter direction is always from the "one" side, and optionally from the "many" side (bi-directional). For

Single cross filter direction means "single direction", and Both means "both directions". A relationship that filters in both directions is commonly described as bi-directional.

Reference:

<https://docs.microsoft.com/en-us/power-bi/transform-model/desktop-relationships-understand>

Question: 122

You have multiple dashboards.

You need to ensure that when users browse the available dashboards from powerbi.com, they can see which dashboards contain Personally Identifiable Information (PII). The solution must minimize configuration effort and impact on the dashboard design.

What should you use?

- A. comments
- B. tiles
- C. Microsoft Information Protection sensitivity labels
- D. Active Directory groups

Answer: D

Explanation:

Microsoft Information Protection sensitivity labels provide a simple way for your users to classify critical

content in Power BI without compromising productivity or the ability to collaborate. Sensitivity labels can be applied to datasets, reports, dashboards, and dataflows.

Reference:

<https://docs.microsoft.com/en-us/power-bi/admin/service-security-sensitivity-label-overview>

Question: 123

You have a Power BI tenant.

You have reports that use financial datasets and are exported as PDF files. You need to ensure that the reports are encrypted.

What should you implement?

- A. dataset certifications
- B. row-level security (RLS)
- C. sensitivity labels
- D. Microsoft Intune policies

Answer: C

Explanation:

General availability of sensitivity labels in Power BI.

Microsoft Information Protection sensitivity labels provide a simple way for your users to classify critical content in Power BI without compromising productivity or the ability to collaborate. Sensitivity labels can be applied on datasets, reports, dashboards, and dataflows. When data is exported from Power BI to Excel, PowerPoint or PDF files, Power BI automatically applies a sensitivity label on the exported file and protects it according to the label's file encryption settings. This way your sensitive data remains protected no matter where it is.

Reference:

<https://powerbi.microsoft.com/en-us/blog/announcing-power-bi-data-protection-ga-and-introducing-new-capabilities/>

Question: 124

Your company plans to completely separate development and production assets such as datasets, reports, and dashboards in Microsoft Power BI.

You need to recommend an application lifecycle strategy. The solution must minimize access to production assets and prevent end users from viewing the development assets.

What should you recommend?

- A. Create production reports in a separate workspace that uses a shared dataset from the development workspace. Grant the end users access to the production workspace.
- B. Create one workspace for development. From the new workspace, publish an app for production.
- C. Create a workspace for development and a workspace for production. From the production workspace, publish an app.
- D. In one workspace, create separate copies of the assets and append DEV to the names of the copied assets. Grant the end users access to the workspace.

Answer: C

Explanation:

Use different work stages (Development, Test, and Production). Deploy from the Development workspace.

Reference:

<https://visualbi.com/blogs/microsoft/powerbi/application-lifecycle-management-power-bi/>

Question: 125

You create a report by using Microsoft Power BI Desktop.

The report uses data from a Microsoft SQL Server Analysis Services (SSAS) cube located on your company's internal network.

You plan to publish the report to the Power BI Service.

What should you implement to ensure that users who consume the report from the Power BI Service have the most up-to-date data from the cube?

- A. a subscription
- B. a scheduled refresh of the dataset
- C. an OData feed
- D. an On-premises data gateway

Answer: D

Explanation:

When you've created dynamic reports in Power BI Desktop, you can share them by publishing to your Power BI site. When you publish a Power BI Desktop file with a live connection to a tabular model to your Power BI site, an on-premises data gateway must be installed and configured by an administrator.

Question: 126

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 scenario, you will NOT be able to return to it. As a result, these questions will not appear in the review screen.

You have a clustered bar chart that contains a measure named Salary as the value and a field named Employee as the axis. Salary is present in the data as numerical amount representing US dollars.

You need to create a reference line to show which employees are above the median salary.

Solution: You create a median line by using the Salary measure.

Does this meet the goal?

- A. Yes
- B. No

Answer: A

Explanation:

The 50th percentile is also known as the median or middle value where 50 percent of observations fall below.

Reference:

https://dash-intel.com/powerbi/statistical_functions_median.php

Question: 127

You have a Power BI dashboard that monitors the quality of manufacturing processes. The dashboard contains the following elements:

A line chart that shows the number of defective products manufactured by day.
A KPI visual that shows the current daily percentage of defective products manufactured.

You need to be notified when the daily percentage of defective products manufactured exceeds 3%. What should you create?

- A. a Q&A visual
- B. a subscription
- C. a smart narrative visual
- D. an alert

Answer: D

Explanation:

Question: 128

DRAG DROP

You are preparing a financial report in Power BI.

You connect to the data stored in a Microsoft Excel spreadsheet by using Power Query Editor as shown in the following exhibit.

	All Column1	1.2 Column2	1.2 Column3	1.2 Column4	1.2 Column5	1.2 Column6
1	Measure	2016	2017	2018	2019	2020
2	Revenue	0.5	0.6	0.55	0.61	0.42
3	Overheads	0.11	0.330410907	0.167055779	0.360178153	0.183179995
4	Cost of Goods	0.204388253	0.165848321	0.25	0.17	0.109073918

You need to prepare the data to support the following:

Visualizations that include all measures in the data over time Year-over-year calculations for all the measures

Which four actions should you perform in sequence? To answer, move the appropriate actions from the list of actions to the answer area and arrange them in the correct order.

Actions	Answer Area
Rename the Attribute column as Year	
Rename the Measure column as Year	
Use the first row as headers	
Use headers as the first row	
Unpivot all the columns other than Measure	
Transpose the table	
Change the data type of the Year column to Date	

Answer:

Explanation:

Transpose the table
Unpivot all the columns other than Measure
Rename the Measure column as Year
Change the data type of the Year column to Date

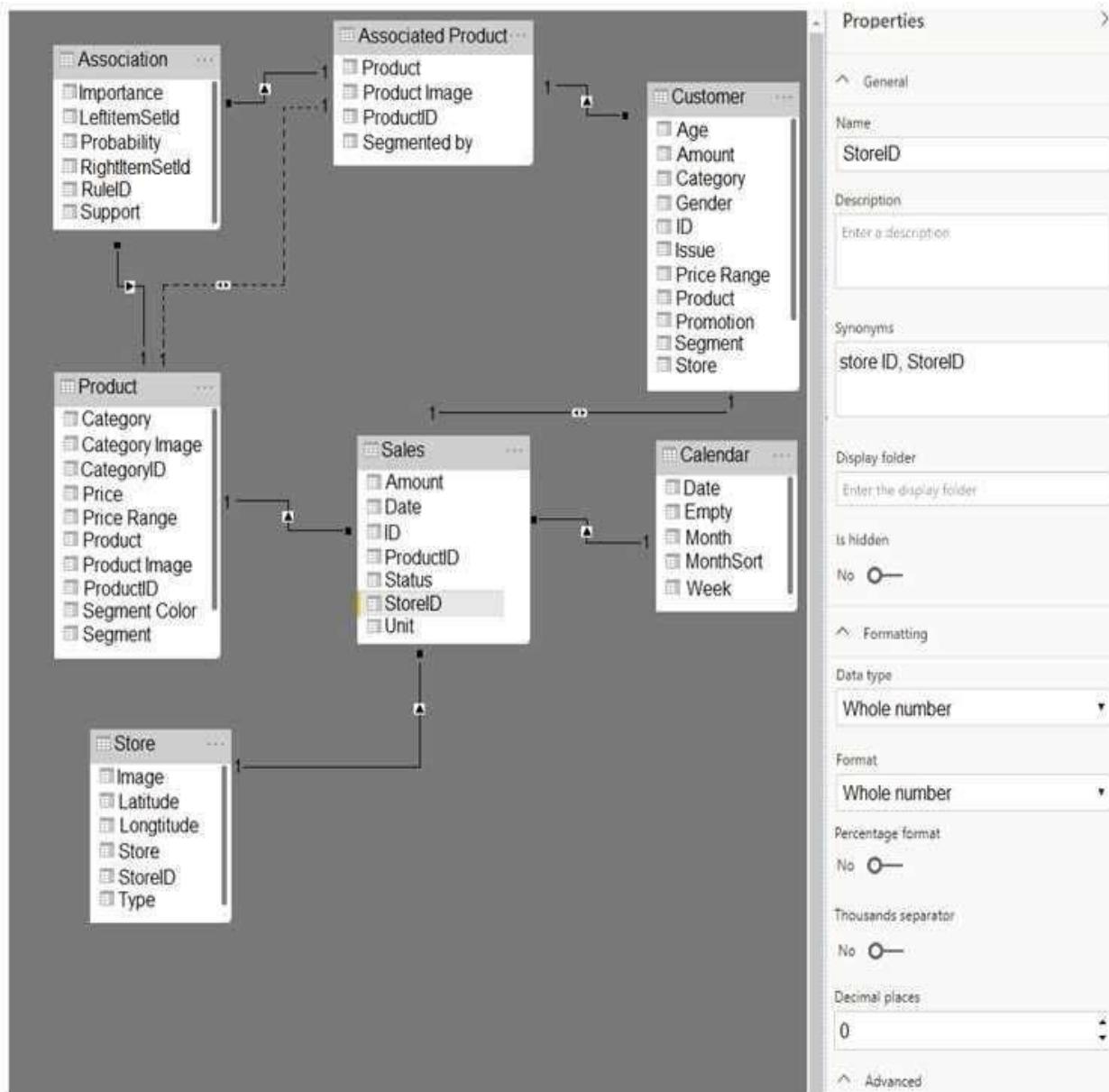
Reference:

<https://support.microsoft.com/en-us/office/unpivot-columns-power-query-0f7bad4b-9ea1-49c1-9d95-f588221c7098>

Question: 129

HOTSPOT

You have the Power BI data model shown in the following exhibit.



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

NOTE: Each correct selection is worth one point.

When a table visual is added to a blank report page and populated by using the StoreID field from the Sales table, a [answer choice] is displayed.

▼
distinct count of the StoreID values
list of all the StoreID values
list of the distinct StoreID values
sum of the StoreID values

Adding a page filter of Sales [StoreID] = 1 will filter the values displayed on the page from [answer choice].

▼
all the tables related to the Sales table
only the Sales table
only the Store table
the Sales table and the Customer table

Explanation:

When a table visual is added to a blank report page and populated by using the StoreID field from the Sales table, a [answer choice] is displayed.

▼
distinct count of the StoreID values
list of all the StoreID values
list of the distinct StoreID values
sum of the StoreID values

Adding a page filter of Sales [StoreID] = 1 will filter the values displayed on the page from [answer choice].

▼
all the tables related to the Sales table
only the Sales table
only the Store table
the Sales table and the Customer table

Question: 130

HOTSPOT

You are enhancing a Power BI model that has DAX calculations.

You need to create a measure that returns the year-to-date total sales from the same date of the previous calendar year.

Which DAX functions should you use? To answer, select the appropriate options in the answer area. NOTE: Each correct selection is worth one point.

```
Sales PYTD =  
  
VAR startyear =  
    STARTOFTYEAR ( PREVIOUSYEAR ( 'Date' [Date] ) )  
  
VAR enddate =  
    LASTDATE ( Sales[Date] ) - 365  
  
RETURN
```

	▼	(Sales[Sales]),
CALCULATE		
DATESBETWEEN		
SAMEPERIODLASTYEAR		
SLIM (

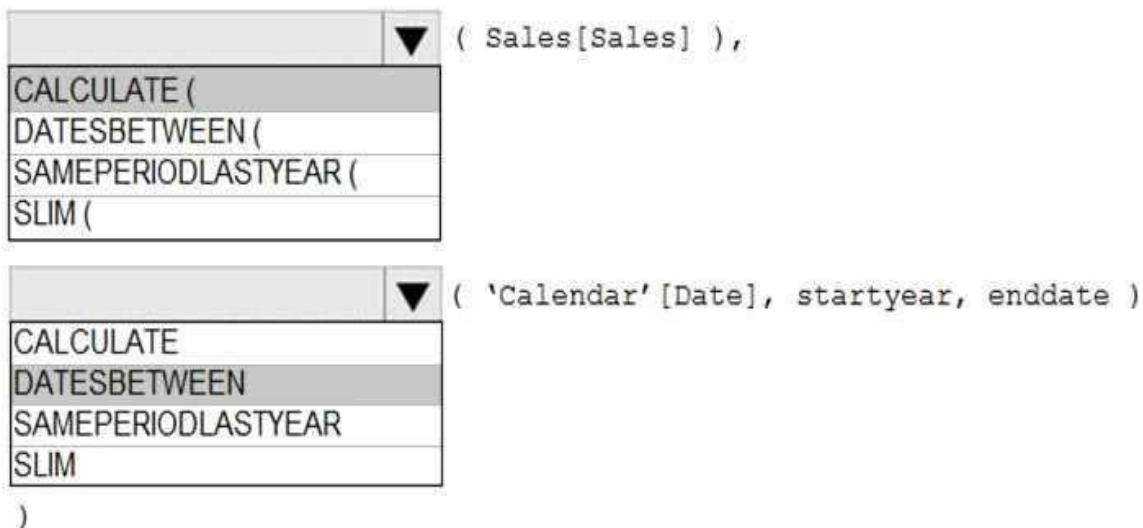
	▼	('Calendar'[Date], startyear, enddate)
CALCULATE		
DATESBETWEEN		
SAMEPERIODLASTYEAR		
SLIM		

```
)
```

Answer:

Explanation:

```
Sales PYTD =  
  
VAR startyear =  
    STARTOFTYEAR ( PREVIOUSYEAR ( 'Date' [Date] ) )  
  
VAR enddate =  
    LASTDATE ( Sales[Date] ) - 365  
  
RETURN
```



```
( Sales[Sales] ),  
CALCULATE(  
DATESBETWEEN(  
SAMEPERIODLASTYEAR(  
SLIM (  
  
( 'Calendar' [Date], startyear, enddate )  
CALCULATE  
DATESBETWEEN  
SAMEPERIODLASTYEAR  
SLIM  
)
```

Reference:

<https://www.kasperonbi.com/get-the-ytd-of-the-same-period-last-year/>

Question: 131

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 scenario, you will NOT be able to return to it. As a result, these questions will not appear in the review screen.

You have several reports and dashboards in a workspace.

You need to grant all organizational users read access to a dashboard and several reports. Solution: You enable included in app for all assets.

Does this meet the goal?

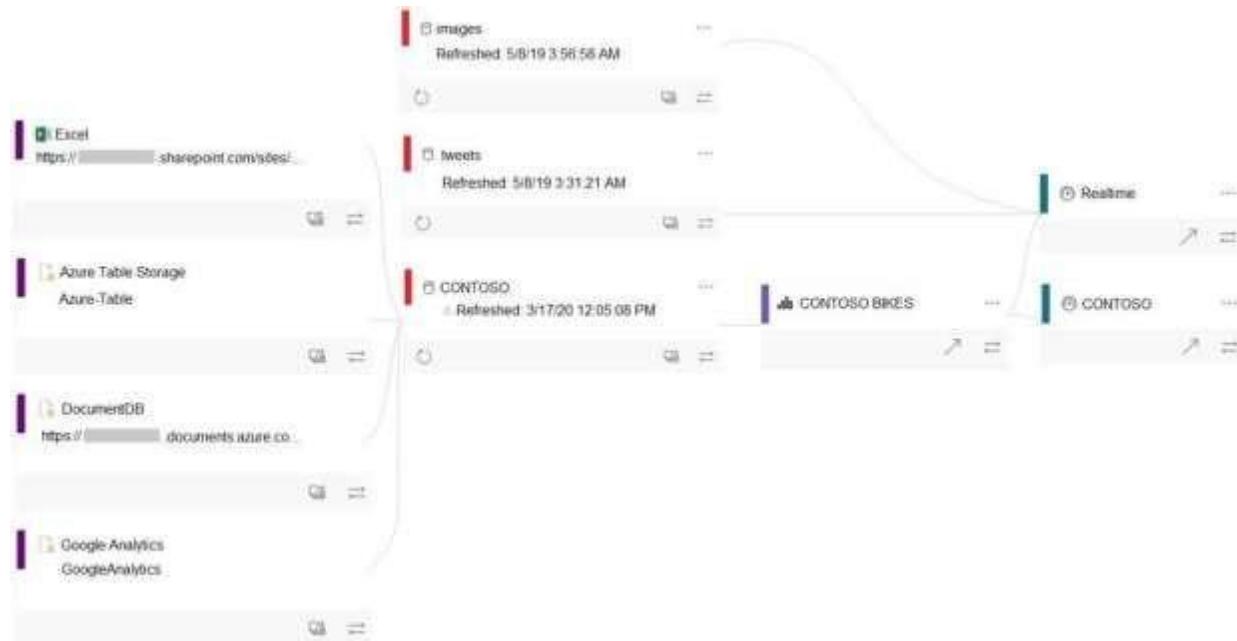
- A. Yes
- B. No

Answer: B

Explanation:

Question: 132**HOTSPOT**

You have the data lineage shown in the following exhibit.



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

NOTE: Each correct selection is worth one point.

The CONTOSO dataset is consumed directly by the

- ▼
 - CONTOSO BIKES report
 - CONTOSO dashboard
 - Realtime dashboard

The Realtime dashboard depends on

- ▼
 - one dataset
 - two datasets
 - three datasets
 - four datasets

Answer:

Explanation:

The CONTOSO dataset is consumed directly by the

CONTOSO BIKES report
CONTOSO dashboard
Realtime dashboard

The Realtime dashboard depends on

one dataset
two datasets
three datasets
four datasets

Box 1: CONTOSO BIKES

report Box 2: three

datasets

Images, tweets and the Contoso datasets.

Question: 133

You are reviewing a query that produces 10,000 rows in the Power Query

Editor. You need to identify whether a column contains only unique

values.

Which two Data Preview options can you use? Each correct answer presents a complete

solution. NOTE: Each correct selection is worth one point.

- A. Column profile
- B. Column distribution
- C. Show whitespace
- D. Column quality
- E. Monospace

Answer: AB

Explanation:

B: Column distribution: This feature provides a set of visuals underneath the names of the columns that showcase the frequency and distribution of the values in each of the columns. The data in these visualizations is sorted in descending order from the value with the highest frequency.

By hovering over the distribution data in any of the columns, you get information about the overall data in the column (with distinct count and unique values).

A: Column profile: This feature provides a more in-depth look at the data in a column [compared to

column distribution]. Apart from the column distribution chart, it contains a column statistics chart.

Reference:

<https://docs.microsoft.com/en-us/power-query/data-profiling-tools>

Question: 134

HOTSPOT

You are building a financial report by using Power BI.

You have a table named financials that contains a column named Date and a column named Sales.

You need to create a measure that calculates the relative change in sales as compared to the previous quarter.

How should you complete the measure? To answer, select the appropriate options in the answer area.

NOTE: Each correct selection is worth one point.

Answer Area

```
Sales_QoQ% =  
IF (  
    ISFILTERED('financials' [Date]),  
    ERROR("Uh oh."),  
    VAR PREV_QUARTER =  
        CALCULATE  
        CALCULATETABLE  
        DATEADD  
        DIVIDE  
        FILTER  
        FIND  
            SUM('financials' [Sales]),  
            ('financials' [Date].[Date], -1, QUARTER)  
        CALCULATE  
        CALCULATETABLE  
        DATEADD  
        DIVIDE  
        FILTER  
        FIND  
)  
RETURN  
    (SUM('financials' [Sales]) - PREV_QUARTER, PREV_QUARTER)  
CALCULATE  
CALCULATETABLE  
DATEADD  
DIVIDE  
FILTER  
FIND  
)
```

Explanation:

Answer:

```

IF (
    ISFILTERED('financials' [Date]),
    ERROR("Uh oh."),
    VAR PREV_QUARTER =
        CALCULATE(
            SUM('financials' [Sales]),
            DATEADD('financials' [Date].[Date], -1, QUARTER)
        )
    RETURN
        DIVIDE(
            SUM('financials' [Sales]) - PREV_QUARTER,
            PREV_QUARTER
        )
)

```

The code illustrates the use of the IF function in DAX. It checks if the current date is filtered. If it is, it returns an error. Otherwise, it calculates the previous quarter's sales and divides the current quarter's sales by it. The code uses three nested CALCULATE functions to perform these calculations.

Box 1: CALCULATE

Box 2: DATEADD

Box 3: DIVIDE

Example:

```

NET_SALES
QoQ% = IF(
    ISFILTERED('Calendar'[Date]),
    ERROR("Time intelligence quick measures can only be grouped or filtered by the Power BI-
provided date hierarchy or primary date column."),
    VAR_
        PREV_QUART
    ER = CALCULATE(
        SUM('research ra_qtr_template'[NET_SALES]),
        DATEADD('Calendar'[Date].[Date], -1, QUARTER)
    )
    RETUR
    N
    DIVID
    E(

```

The example shows how to calculate the percentage change in sales compared to the previous quarter. It uses the IF function to handle cases where the date is filtered. It then defines a variable PREV_QUARTER using a CALCULATE function that sums the NET_SALES for the previous quarter. Finally, it divides the current quarter's sales by the previous quarter's sales.

```
SUM('research ra_qtr_template'[NET_SALES]) - _PREV_QUARTER,  
    _PREV_QUARTER  
)  
)
```

Reference:

<https://community.powerbi.com/t5/Desktop/Error-calculating-QOQ-using-quick-measure/m-p/547054>

Question: 135

You have a Q&A visual that displays information from a table named Carriers as shown in the following exhibit.

The screenshot shows a Q&A visual interface. At the top, there is a search bar containing the text "what airline is B6". Below the search bar are two small icons: a refresh symbol and a gear symbol. The main area displays the results for the query "what is B6". The results table has two columns: "carrier" and "name". The first row shows "B6" under "carrier" and "JetBlue Airways" under "name". There is a blue upward arrow icon next to the "carrier" column header. To the right of the results table is an "i" icon inside a circle, likely representing a help or info function.

carrier	name
B6	JetBlue Airways

You need to ensure that users can ask questions by using the term airline or carrier. The solution must minimize changes to the data model.

What should you do?

- A. Add a duplicate query named Airline.
- B. Add airline as a synonym of carrier.
- C. Rename the carrier column as airline in the Carriers query.
- D. Rename the query from Carriers to airlines.

Answer: B

Explanation:

Add synonyms to tables and columns: This step applies specifically to Q&A (and not to Power BI reports in general). Users often have a variety of terms they use to refer to the same thing, such as

total sales, net sales, total net sales. You can add these synonyms to tables and columns in the Power BI model.

This step can be important. Even with straightforward table and column names, users of Q&A ask questions using the vocabulary that first comes to them. They're not choosing from a predefined list of columns. The more sensible synonyms you add, the better your users' experience is with your report.

Reference:

<https://docs.microsoft.com/en-us/power-bi/natural-language/q-and-a-best-practices>

Question: 136

You need to create the On-Time Shipping report.

The report must include a visualization that shows the percentage of late orders. Which type of visualization should you create?

- A. scatterplot
- B. bar chart
- C. piechart

Answer: A

Explanation:

Question: 137

You need to design the data model to meet the report requirements. What should you do in Power BI Desktop?

- A. From Power Query, add columns to the Orders table to calculate the calendar quarter and the calendar month of the OrderDate column.
- B. From Power BI Desktop, use the Auto date/time option when creating the reports.
- C. From Power Query, add a date table. Create an active relationship to the OrderDate column in the Orders table and an inactive relationship to the ShippedDate column in the Orders table.
- D. From Power Query, use a DAX expression to add columns to the Orders table to calculate the calendar quarter of the OrderDate column, the calendar month of the OrderDate column, the calendar quarter of the ShippedDate column, and the calendar month of the ShippedDate column

Answer: D

Explanation:

Question: 138

You need to create the Top Customers report.

Which type of filter should you use, and at which level should you apply the filter? To answer, select

the appropriate options in the answer area. NOTE; Each correct selection is

Answer Area

Filter type: Top N

Level: Report

worth one point.

Answer: See the answer as below in

Explanation:

Answer as below

Answer Area

Filter type: Top N

Level: Report

Question: 139

You need to create a relationship in the dataset for RLS.
What should you do? To answer select the appropriate options in the answer area. NOTE: Each correct selection is worth one point.

Answer Area

Create a one-to-many relationship between the Sales Employees table and the Customer Details worksheet

Answer: See the answer as below in .

Explanation:

Answer as below

Answer Area

Create a one-to-many relationship between the Sales Employees table and the Customer Details worksheet

Question: 140

You need to create a measure that will return the percentage of late orders.

How should you complete the DAX expression? To answer, select the appropriate options in the answer area.

NOTE: Each correct selection is worth one point.

Answer Area

```
Late Orders Percent =  
VAR OrderCount =  
    COUNTROWS ( 'Orders' )  
VAR LateOrders =  
    CALCULATE  
        COUNTROWS ( 'Orders' ),  
        FILTER ( Orders, Orders[ShippedDate] > Orders[RequiredDate] )  
    )
```

Answer: See the answer as below in .

Explanation:

Answer as below

Answer Area

```
Late Orders Percent =  
VAR OrderCount =  
    COUNTROWS ( 'Orders' )  
VAR LateOrders =  
    CALCULATE  
        COUNTROWS ( 'Orders' ),  
        FILTER ( Orders, Orders[ShippedDate] > Orders[RequiredDate] )  
    )
```

Question: 141

You have a Power BI dataset that contains a table named Temperature Readings. Temperature Readings contains the columns shown in the following table.

Name	Data type	Value example
DateTime	DateTime	4-Aug-2020 13:30:01
Longitude	Decimal	10.049567988755534
Latitude	Decimal	53.462766759577057
TempCelsius	Decimal	12.5

The table has 12 million rows. All the columns are needed for analysis.

You need to optimize the dataset to decrease the model size. The solution must not affect the precision of the data.

What should you do?

- A. Split the DateTime column into separate date and time columns.
- B. Disable the Power Query load.
- C. Round the Longitude column two decimal places.
- D. Change the data type of the TempCelsius column to Integer

Answer: B

Explanation:

Disable Power Query load.

Power Query queries that are intended support data integration with other queries should not be loaded to the model. To avoid loading the query to the model, take care to ensure that you disable query load in these instances.

Reference:

<https://docs.microsoft.com/en-us/power-bi/guidance/import-modeling-data-reduction#disable-power-query-load>

Question: 142

In Power Bi Desktop, you are creating visualizations in a report based on an imported dataset. You need to allow Power Bi users to export the summarized data used to create the visualizations but prevent the users from exporting the underlying data.

What should you do?

- A. From Power BI Desktop, configure the Data Load settings for the current file.
- B. From the Power BI service, configure the dataset permissions.
- C. From Power BI Desktop, configure the Report settings for the current file.
- D. From Power BI Desktop, modify the data source permissions.

Answer: B

Explanation:

Question: 143

HOTSPOT

You have a power BI tenant that hosts the datasets shown in the following table.

Name	Contents	Used to generate
Sales	Sales targets Sales data Employee salary data	Daily performance reports Quarterly reports used to calculate bonuses
Operations	Environmental sensor data	Reports that show average sensor readings over time
Finance	Financial transaction data	Budget planning reports Monthly board reports

You have the following requirements:

- The export of reports that contain Personally Identifiable Information (PII) must be prevented.
- Data used for financial decisions must be reviewed and approved before use.

For each of the following statements, select Yes if the statement is true. Otherwise select No. NOTE: Each correct selection is worth one point

Answer Area

Statements	Yes	No
The Sales dataset requires a sensitivity label.	<input type="radio"/>	<input type="radio"/>
The Operations dataset requires a sensitivity label and must be certified.	<input type="radio"/>	<input type="radio"/>
The Finance dataset requires a sensitivity label and must be certified.	<input type="radio"/>	<input type="radio"/>

Answer:

Explanation:

Answer Area

Statements	Yes	No
The Sales dataset requires a sensitivity label.	<input checked="" type="radio"/>	<input type="radio"/>
The Operations dataset requires a sensitivity label and must be certified.	<input type="radio"/>	<input checked="" type="radio"/>
The Finance dataset requires a sensitivity label and must be certified.	<input checked="" type="radio"/>	<input type="radio"/>

Question: 144

You have a Power BI report. The report contains visualizations that have interactions. You need to identify which visualizations take the longest to complete. What should you use?

- A. SQL Server Profiler
- B. Performance Analyzer in Power BI Desktop
- C. Query Diagnostics in Power BI
- D. Microsoft Edge DevTools

Answer: B

Explanation:

Use Power BI Desktop Performance Analyzer to optimize reports.

In Power BI Desktop you can find out how each of your report elements, such as visuals and DAX formulas, are performing. Using the Performance Analyzer, you can see and record logs that measure how each of your report elements performs when users interact with them, and which aspects of their performance are most (or least) resource intensive.

Reference:

<https://docs.microsoft.com/en-us/power-bi/create-reports/desktop-performance-analyzer>

Question: 145

You are building a Power BI report to analyze customer segments.

You need to identify customer segments dynamically based on the Bounce Rate across dimensions such as source, geography, and demographics. The solution must minimize analysis effort.

Which type of visualization should you use?

- A. decomposition tree
- B. funnel chart
- C.Q&A
- D.key influencers

Answer: D

Explanation:

The key influencers visual is a great choice if you want to:

See which factors affect the metric being analyzed.

Contrast the relative importance of these factors. For example, do short-term contracts affect churn more than long-term contracts?

Note: The key influencers visual helps you understand the factors that drive a metric you're interested in. It analyzes your data, ranks the factors that matter, and displays them as key influencers. For example, suppose you want to figure out what influences employee turnover, which is also known as churn. One factor might be employment contract length, and another factor might be commute time.

<https://docs.microsoft.com/en-us/power-bi/visuals/power-bi-visualization-influencers>

Question: 146

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 create active relationships between Sales and both Date tables in the modeling view.
- 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. Import the Date table twice in Power Query and create active relationships between Sales and both Date tables in the modeling view.

Answer: D

Explanation:

Microsoft recommends defining active relationships whenever possible. They widen the scope and potential of how your model can be used by report authors, and users working with Q&A.

Refactoring methodology (example): Here's a methodology to refactor a model from a single role-playing dimension-type table, to a design with one table per role.

Remove any inactive relationships.

Consider renaming the role-playing dimension-type table to better describe its role. In the example, the Airport table is related to the ArrivalAirport column of the Flight table, so it's renamed as Arrival Airport.

Create a copy of the role-playing table, providing it with a name that reflects its role. If it's an Import table, we recommend defining a calculated table. If it's a DirectQuery table, you can duplicate the Power Query query.

Only one relationship can be active.

Note: If you query two or more tables at the same time, when the data is loaded, Power BI Desktop attempts to find and create relationships for you. The relationship options Cardinality, Cross filter direction, and Make this relationship active are automatically set.

Reference:

<https://docs.microsoft.com/en-us/power-bi/transform-model/desktop-create-and-manage-relationships>

<https://docs.microsoft.com/en-us/power-bi/guidance/relationships-active-inactive>

Question: 147

In Power BI Desktop, you are building a sales report that contains two tables. Both tables have row-

level security (RLS) configured.

You need to create a relationship between the tables. The solution must ensure that bidirectional cross-filtering honors the RLS settings.

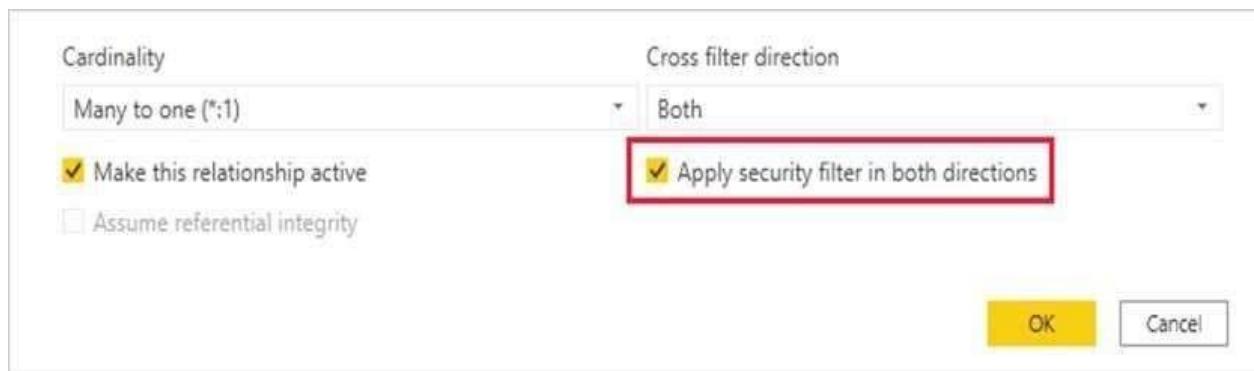
What should you do?

- A. Create an active relationship between the tables and select Assume referential integrity.
- B. Create an inactive relationship between the tables and select Assume referential integrity.
- C. Create an inactive relationship between the tables and select Apply security filter in both directions.
- D. Create an active relationship between the tables and select Apply security filter in both directions.

Answer: D

Explanation:

By default, row-level security filtering uses single-directional filters, whether the relationships are set to single direction or bi-directional. You can manually enable bi-directional cross-filtering with row-level security by selecting the relationship and checking the Apply security filter in both directions checkbox. Select this option when you've also implemented dynamic row-level security at the server level, where row-level security is based on username or login ID.



Reference:

<https://docs.microsoft.com/en-us/power-bi/admin/service-admin-rls>

Question: 148

You have a report that includes a card visualization.

You need to apply the following conditional formatting to the card while minimizing design effort. For values that are greater than or equal to 100, the font of the data label must be dark red.

For values that are less than 100, the font of the data label must be dark gray. Which type of format should you use?

- A. Color scale
- B. Rules
- C. Field value

Answer: C

Explanation:

Question: 149

You have a Power BI report that uses a dataset based on an Azure Analysis Services live connection. You need to ensure that users can use Q&A from the Power BI service for the dataset.

What should you do?

- A. From the Power BI service, add an enterprise gateway to the dataset.
- B. From Power BI Desktop, add synonyms and suggested questions.
- C. From Power BI Desktop, add a Q&A visual to the report.
- D. From the Power BI service, select Turn on Q& A for this dataset.

Answer: D

Explanation:

Question: 150

HOTSPOT

You are profiling data by using Power Query Editor.

The AddressLine2 column in a table named Address is shown in the following exhibit.



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

NOTE: Each correct selection is worth one point.

Answer Area

There are [answer choice] different values in the column including nulls.



There are [answer choice] non-null values that occur only once in the column.



Explanation:

Answer:

Answer Area

There are [answer choice] different values in the column including nulls. 12 ▾

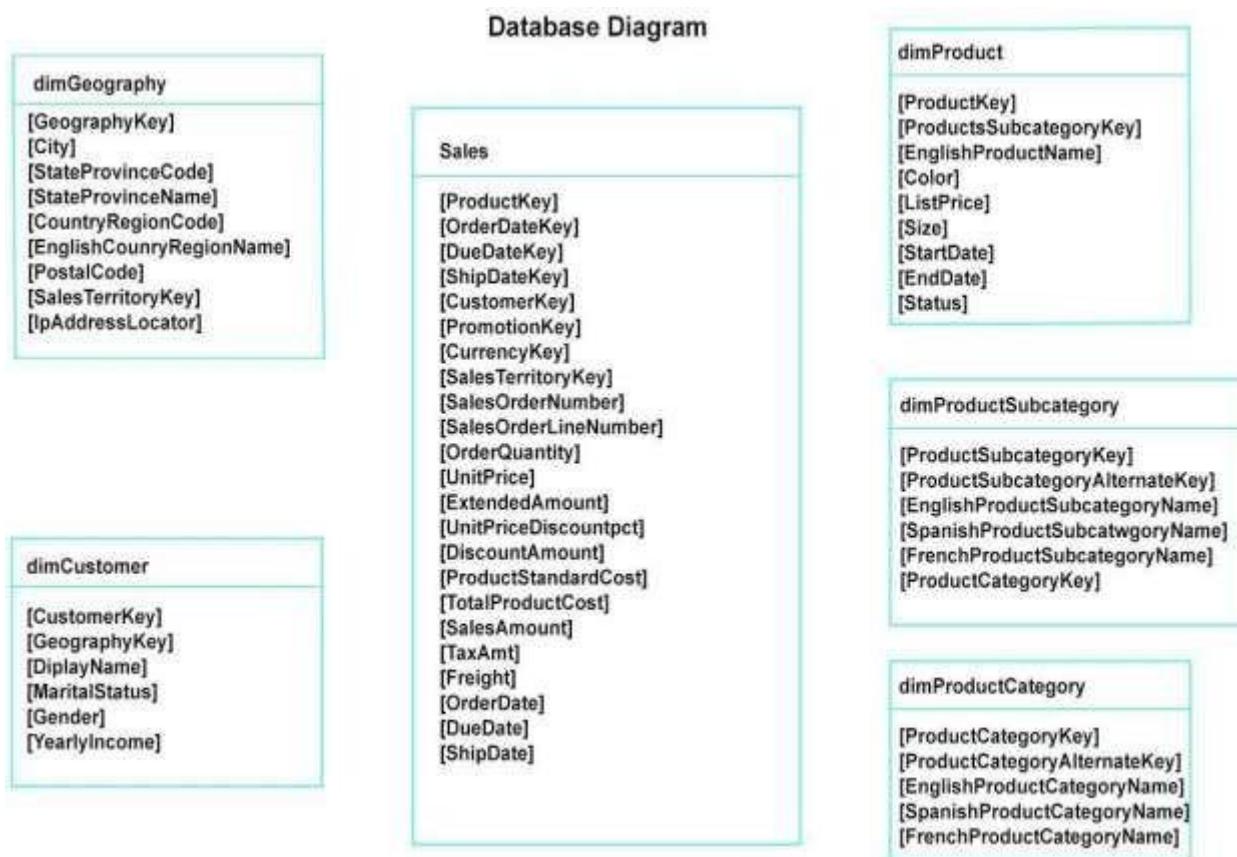
There are [answer choice] non-null values that occur only once in the column. 11 ▾

Question: 151

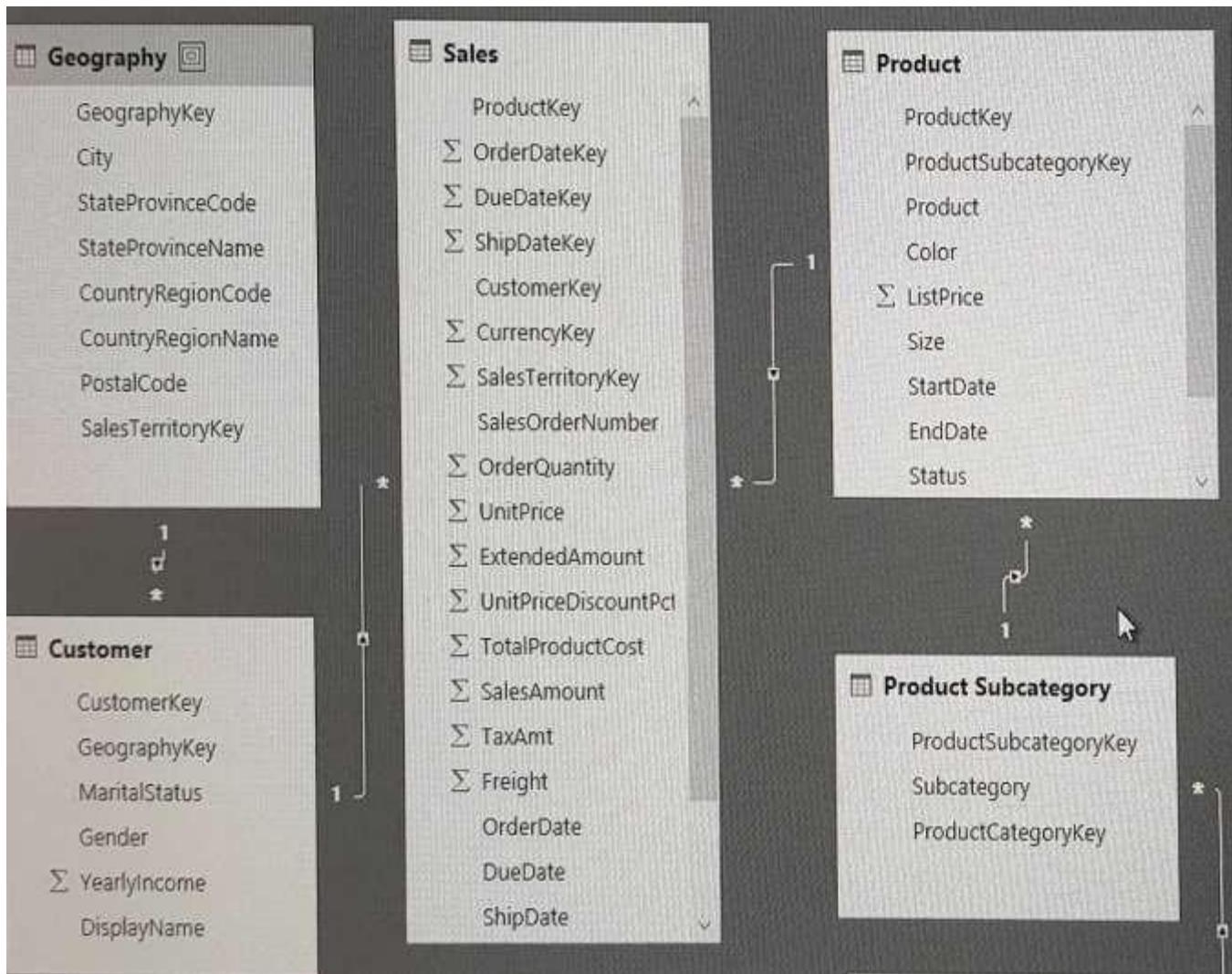
Note: This question is a part of a series of questions that present the same scenario. For your convenience, the scenario is repeated in each question. Each question presents a different goal and answer choices, but the text of the scenario is exactly the same in each question in this series.

Start of repeated scenario

You have a Microsoft SQL Server database that has the tables shown in the Database Diagram exhibit. (Click the Exhibit.)



You plan to develop a Power BI model as shown in the Power BI Model exhibit. (Click the Exhibit).



You plan to use Power BI to import data from 2013 to 2015. Product Subcategory [Subcategory] contains NULL values.

End of repeated scenario.

You implement the Power BI model.

You need to add a new column to the Product Subcategory table that uses the following formula.

=if [Subcategory] =null then "NA" else

[Subcategory] Which command should you use in

Query Editor?

- A. Column From Examples
- B. Custom Column
- C. Invoke Custom Function
- D. Conditional Column

Answer: D

Explanation:

Reference: <http://community.powerbi.com/t5/Desktop/if-then-else/td-p/117999>

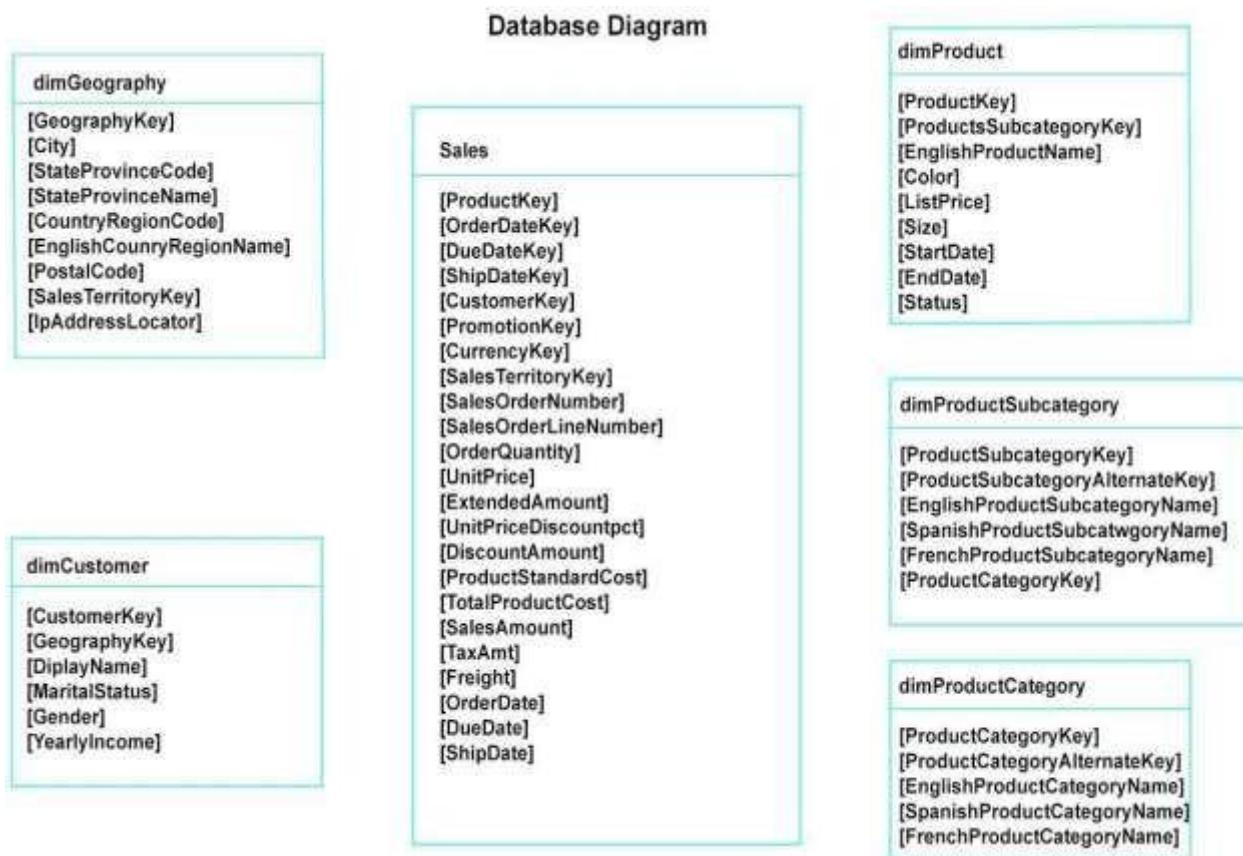
Question: 152

DRAG DROP

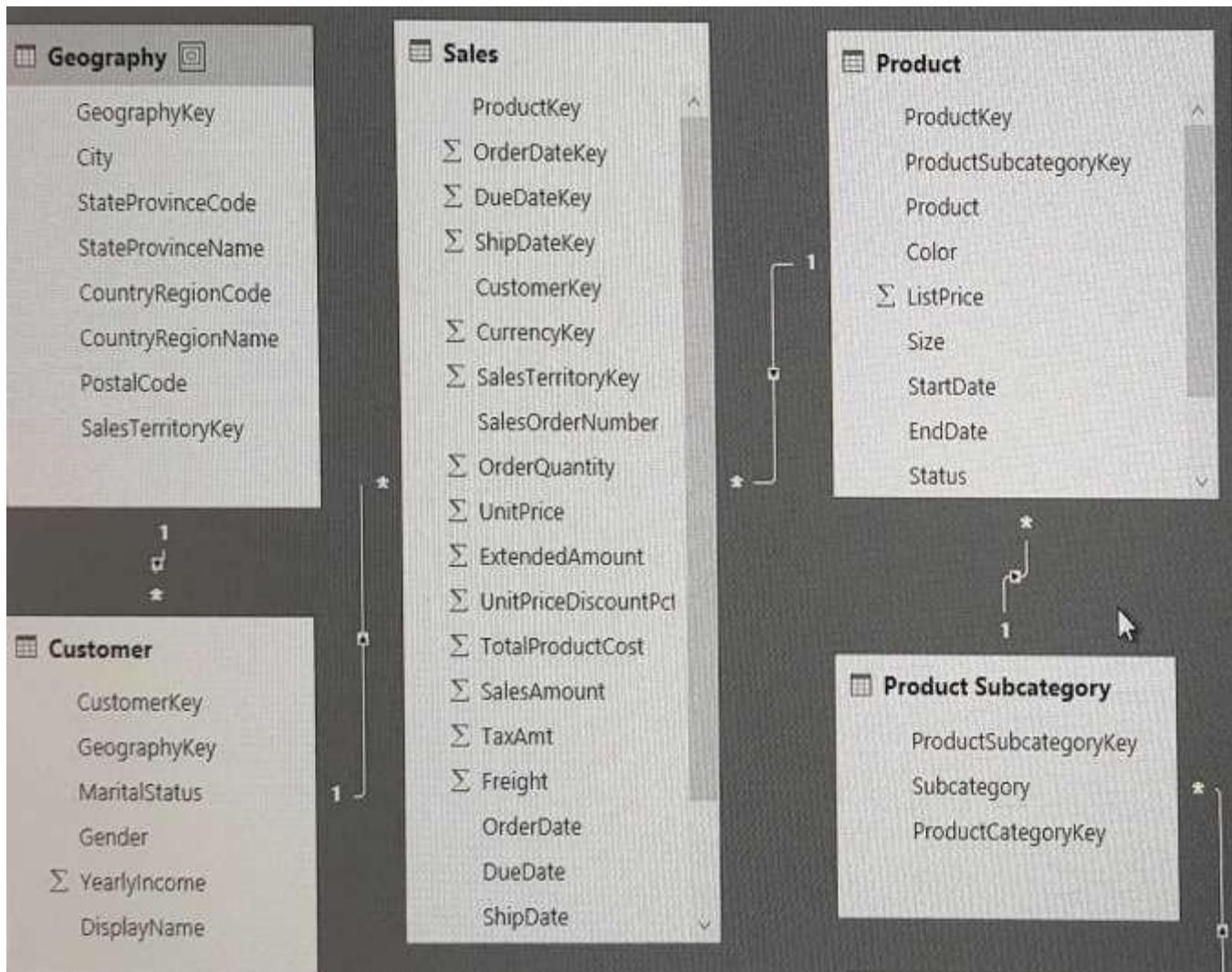
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You plan to develop a Power BI model as shown in the Power BI Model exhibit. (Click the Exhibit).



You plan to use Power BI to import data from 2013 to

2015. Product Subcategory [Subcategory] contains

NULL values. End of repeated scenario.

You implement the Power BI model.

You need to edit the Product Category table query to match the desired Power BI model.

How should you complete the advanced query? To answer, drag the appropriate values to the correct targets. Each value may be used once, more than once, or not at all.

You may need to drag the split bar between panes or scroll to view

content. NOTE: Each correct selection is worth one point.

Values**Answer Area**

Table.Combine

```

let
  Source= Sql.Databases ("localhost"),
  DB1= Source {[Name= "DB1"]} [Data],
  dbo_DimProductCategory= DB1[[Schema= "dbo", Item= "DimProductCategory"]] [Data],
  # "Var1" = Value
  (dbo_DimProductCategory, {"ProductCategoryAlternateKey",
  "SpanishProductName", "FrenchProductName"}),
  # "Var2" = Value
  (# "Var1", {{ "EnglishProductName", "Category"}, {"DimProductSubcategory", "Subcategory"}})
in
# "Var2"

```

Table.RemovedColumns

Table.RemoveRows

Table.RenameColumns

Table.ReorderColumns

Table.SelectColumns

Explanation:

Answer:**Values****Answer Area**

Table.Combine

```

let
  Source= Sql.Databases ("localhost"),
  DB1= Source {[Name= "DB1"]} [Data],
  dbo_DimProductCategory= DB1[[Schema= "dbo", Item= "DimProductCategory"]] [Data],
  # "Var1" = Table.RemovedColumns
  (dbo_DimProductCategory, {"ProductCategoryAlternateKey",
  "SpanishProductName", "FrenchProductName"})

```

Table.RemovedColumns

Table.RemoveRows

Table.RenameColumns

Table.ReorderColumns

Table.SelectColumns

Reference:

<https://msdn.microsoft.com/en-us/library/mt260776.aspx>

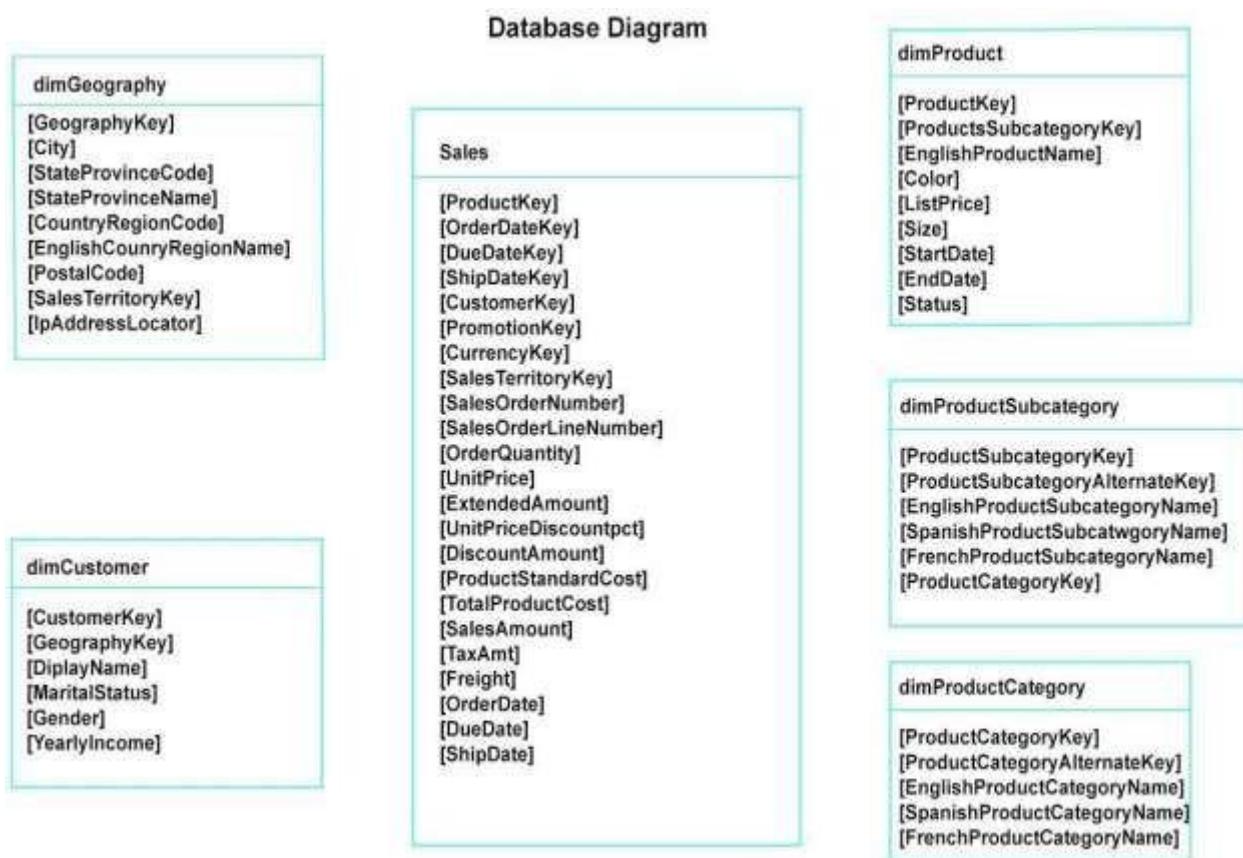
<https://msdn.microsoft.com/en-us/library/mt260808.aspx>

Question: 153

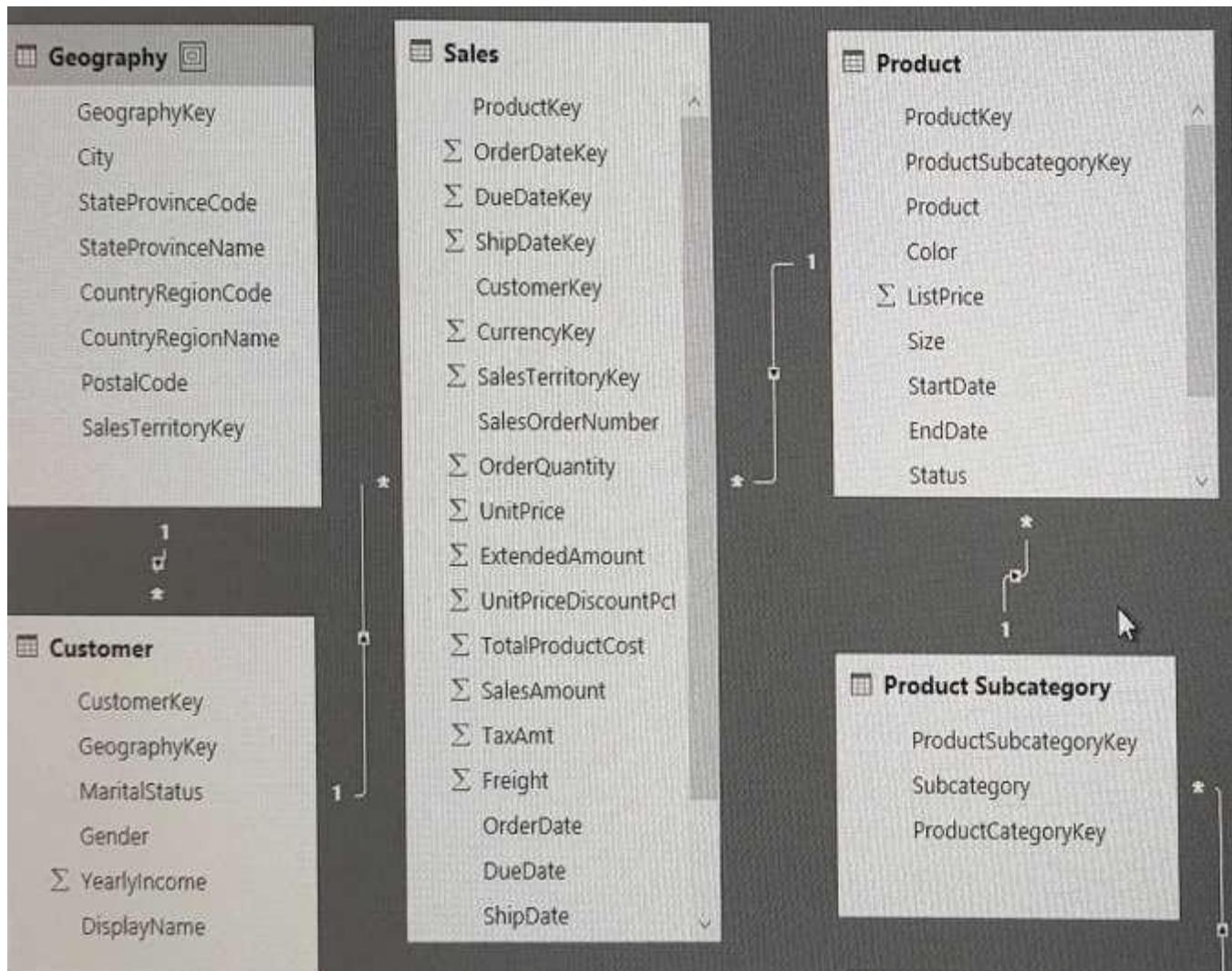
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Start of repeated scenario

You have a Microsoft SQL Server database that has the tables shown in the Database Diagram exhibit. (Click the Exhibit.)



You plan to develop a Power BI model as shown in the Power BI Model exhibit. (Click the Exhibit).



You plan to use Power BI to import data from 2013 to 2015. Product Subcategory [Subcategory] contains NULL values. End of repeated scenario.

You implement the Power BI model.

You add another table named Territory to the model. A sample of the data is shown in the following table.

Territory Key	Territory Name
1	United States
1	USA
2	Canada
2	Can
3	United Kingdom
3	UK

You need to create a relationship between the Territory table and the Sales table.

Which function should you use in the query for Territory before you create the relationship?

- A. Table.RemoveMatchingRows
- B. Table.Distinct
- C. Table.InDistinct
- D. Table.ReplaceMatchingRows

Answer: B

Explanation:

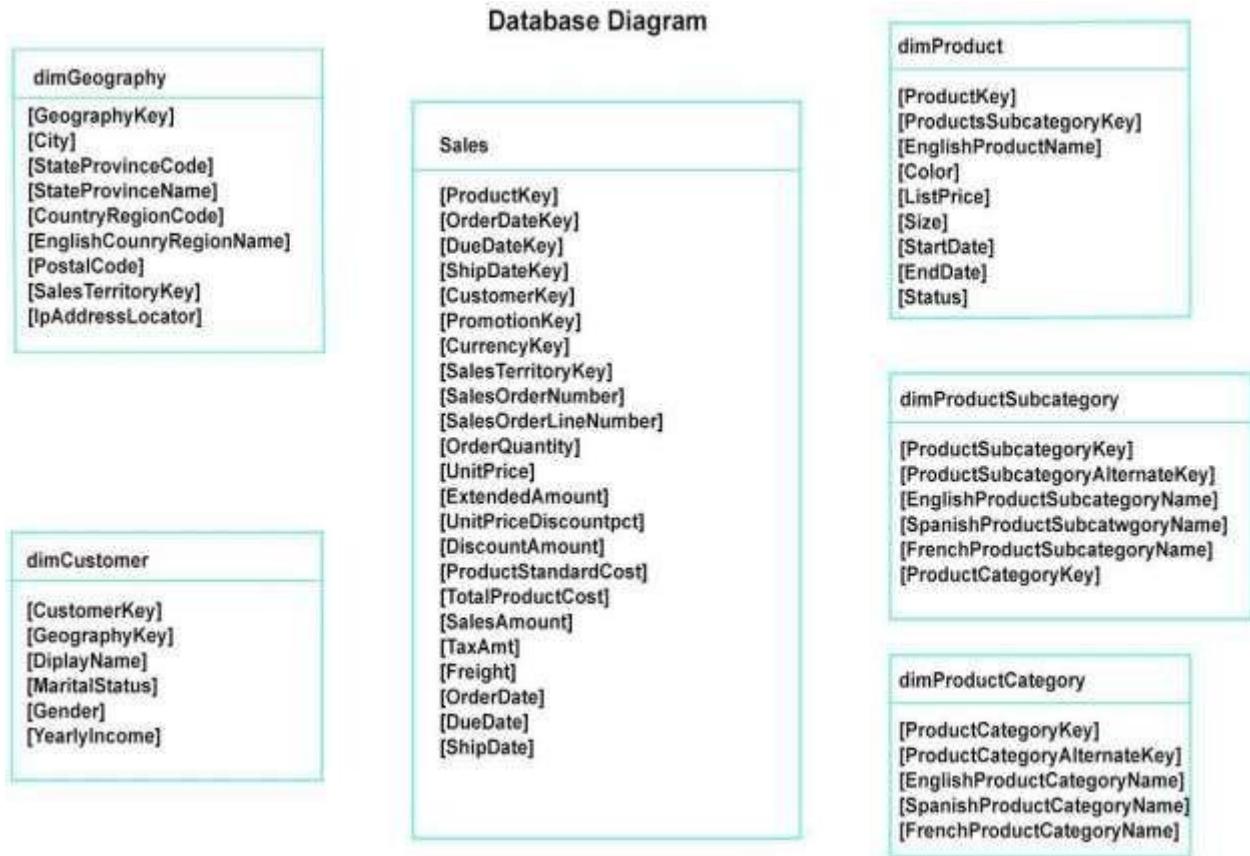
Reference: <https://msdn.microsoft.com/en-us/library/mt260775.aspx>

Question: 154

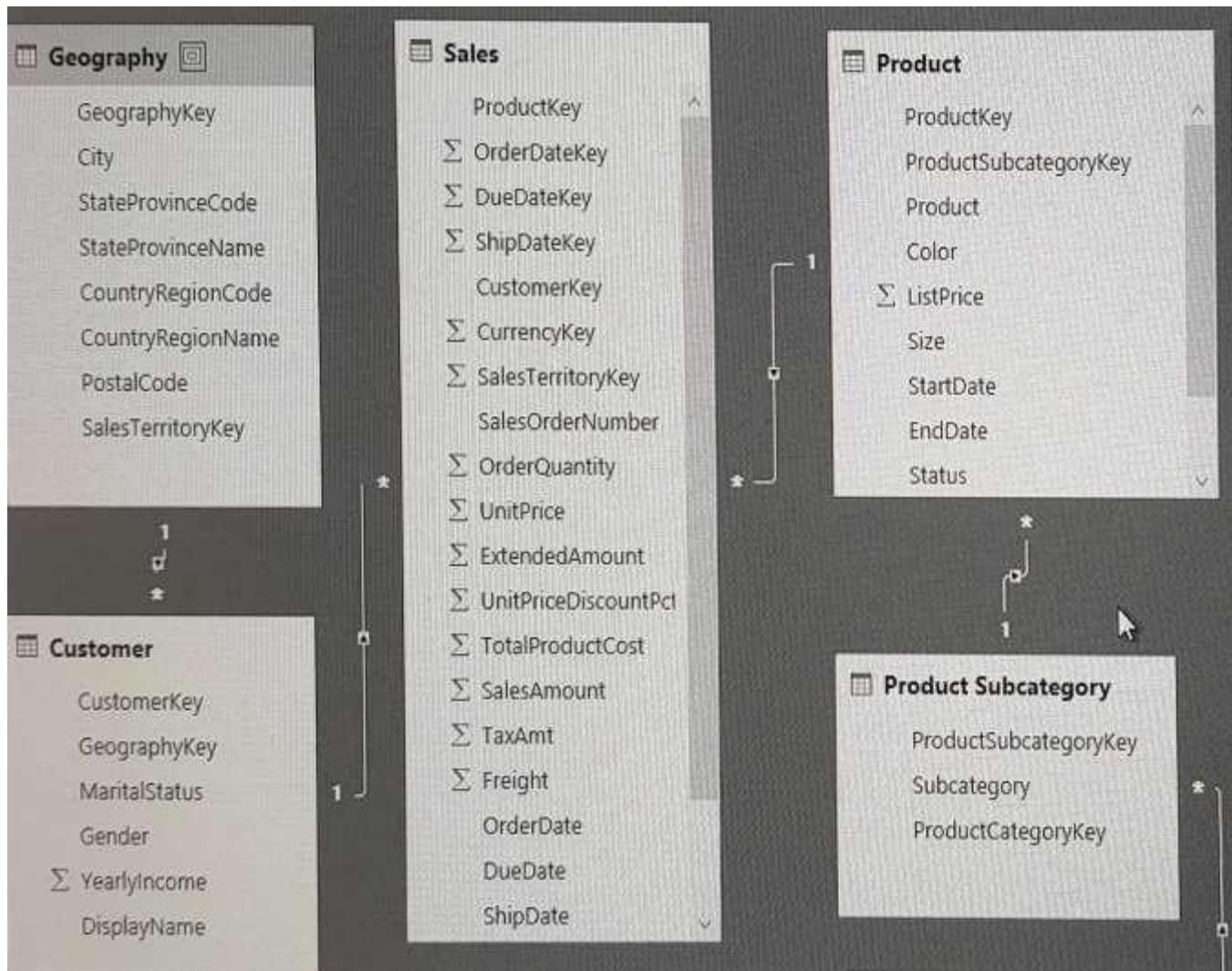
Note: This question is a part of a series of questions that present the same scenario. For your convenience, the scenario is repeated in each question. Each question presents a different goal and answer choices, but the text of the scenario is exactly the same in each question in this series.

Start of repeated scenario

You have a Microsoft SQL Server database that has the tables shown in the Database Diagram exhibit. (Click the Exhibit.)



You plan to develop a Power BI model as shown in the Power BI Model exhibit. (Click the Exhibit).



You plan to use Power BI to import data from 2013 to

2015. Product Subcategory [Subcategory] contains

NULL values. End of repeated scenario.

You implement the Power BI model.

You need to add a measure to rank total sales by product. The results must appear as shown in the following table.

Rank	Product	SalesAmount
1	Product3	13,0000
1	Product2	13,0000
2	Product1	12,0000
3	Product5	10,000
3	Product4	10,000

Which DAX formula should you use?

- A. Product Ranking= RANKX (Product, [SalesAmount], , DESC, Skip)
- B. Product Ranking= RANKX (ALL, ('Product'), [SalesAmount], , DESC, Dense)
- C. Product Ranking= RANKX (ALL, ('Product'), [SalesAmount], , DESC, Skip)
- D. Product Ranking= RANKX (ALL ('Product'), [SalesAmount], , Asc, Dense)

Answer: B

Explanation:

Reference: <https://msdn.microsoft.com/en-us/library/gg492185.aspx>

Question: 155

You manage a Power BI model has a table named Sales and product.

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

What should you do from Power BI Desktop?

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

Answer: D

Explanation:

Reference: <https://docs.microsoft.com/en-us/power-bi/power-bi-how-to-report-filter>

Question: 156

In the Power BI service, you create an app workplace that contains several dashboards.

You need to provide a user named user1@contoso.com with the ability to edit and publish dashboards.

What should you do?

- A. Modify the members of the app workspace.
- B. Configure security for the dataset used by the app.
- C. Share the dashboard, and then modify the Access settings of the dashboard.
- D. From the app workspace, click Update app, and then configure the Access settings.

Answer: C

Explanation:

Question: 157

Your organization has a team of power users who recently created 20 Power BI dashboards. The power users share the dashboards with other users in the organization.

When the users attempt to access the dashboards, they receive the error message shown in the exhibit. (Click the Exhibit.)

Microsoft Power BI

Sorry...

We can't finish signing you up.

Your IT department has turned off signup for Microsoft Power BI.
Contact them to complete signup.

[Learn about other ways to get Office](#)

You need to ensure that all the users can access the dashboards. What should you do first?

- A. From the Microsoft Office 365 Admin center, and the Power BI (free) subscription, and then assign a license to each user.
- B. From the Power BI Admin portal, modify the Privacy Settings.
- C. From the properties of each dashboard, modify the Share dashboard settings.
- D. Instruct each user to install Microsoft Office 2016.

Answer: A

Explanation:

Reference: <http://www.nubo.eu/en/blog/2016/12/Enable-PowerBI-On-Office-365/>

Question: 158

DRAG DROP

You have a Microsoft Excel workbook that contains two tables. From Power BI, you create a dashboard that displays data from the tables. You update the tables each day.

You need to ensure that the virtualizations in the dashboard are updated daily. Which three actions should you perform in sequence? To answer, move the appropriate actions from the list of actions to answer area and arrange them in the correct order.

Actions	Answer Area
For each dataset, modify the Schedule Refresh settings.	
Download and install an on-premises data gateway (personal).	
For each dataset, modify the Gateway Connection settings.	
Add subscriptions for the reports.	
Download and install Power BI Desktop.	

Explanation:

Answer:

Answer Area

Download and install an on-premises data gateway (personal).

For each dataset, modify the Gateway Connection settings.

For each dataset, modify the Schedule Refresh settings.

Reference: <https://docs.microsoft.com/en-us/power-bi/refresh-scheduled-refresh>

Question: 159

You embed a Power BI report in a Microsoft SharePoint Online page.

A user name User1 can access the SharePoint Online page, but the Power BI web part displays the following error message: "This content isn't available".

User1 is unable to view the report.

You verify that you can access the SharePoint Online page and that the Power BI report displays as expected.

You need to ensure that User1 can view the report from SharePoint

Online. What should you do?

- A. Publish the app workspace.
- B. Edit the settings of the Power BI web part.
- C. Modify the members of the app workplace.
- D. Share the dashboards in the app workspace.

Answer: C

Explanation:

Reference: <https://docs.microsoft.com/en-us/power-bi/service-embed-report-spo>

Question: 160

HOTSPOT

Your company plans to use Power BI for 20 users in the sales department. The users will perform the following tasks:

- Access a published Power BI app
- Modify reports in an app workspace
- Share dashboards created in My Workspace

You need to identify which Power BI licenses are required for the tasks. The solution must use the Power BI (free) licenses, whenever possible.

Which license should you identify for each task? To answer, select the appropriate options in the answer area.

NOTE: Each correct selection is worth one point.

Answer Area

Access a published Power BI app:

- Power BI (free)
 Power BI PRO

Modify report in an app workspace:

- Power BI (free)
 Power BI PRO

Share dashboards created in My Workspace:

- Power BI (free)
 Power BI PRO

Answer:

Explanation:

Answer Area

Access a published Power BI app:

<input checked="" type="checkbox"/>	Power BI (free)
<input type="checkbox"/>	Power BI PRO

Modify report in an app workspace:

<input checked="" type="checkbox"/>	Power BI (free)
<input type="checkbox"/>	Power BI PRO

Share dashboards created in My Workspace:

<input checked="" type="checkbox"/>	Power BI (free)
<input type="checkbox"/>	Power BI PRO

Reference:

<https://docs.microsoft.com/en-us/power-bi/service-create-distribute-apps> <https://docs.microsoft.com/en-us/power-bi/service-collaborate-power-bi-workspace>

Question: 161

You have an app workspace that contains a dashboard and four reports. All the reports are generated from a single dataset that contains sales data for your company.

The reports display the data configured as shown in the following table.

Report name	Data displayed	Data characteristic
Sales Data1	Sales from the start of 2013 to the end of 2015	The company was owned by another company named Contoso, Ltd. from 2013 to 2015
Sales Data2	Sales from the start of 2011 to the end of 2016	The company changed the line of products sold frequently from 2011 to 2016
Sales Data3	Sales from the start of 2016 to the end of 2017	The company hired new management that started in 2016
Sales Data4	Sales from the start of 2011 to the end of 2014	The company was being sued by a competitor from 2011 to 2014

You need to ensure that the users of the reports can locate the correct report by using natural language queries.

What should you do?

- A. From the properties of the dataset, create four Featured Q&A Questions.
- B. From the Format settings of the reports, modify the Page Information.
- C. From the properties of the dataset, modify the Q&A and Cortana settings.
- D. From the properties of the workspace, modify the Language Settings.

Answer: C

Explanation:

Reference: <https://docs.microsoft.com/en-us/power-bi/service-q-and-a-direct-query#limitations-during-public-preview>

Question: 162

HOTSPOT

You open powerbi.com as shown in the following exhibit.

The screenshot shows the Power BI Q&A interface. On the left, there's a navigation pane with sections like Favorites, Recent, Apps, Workspaces, DASHBOARDS, REPORTS, WORKBOOKS, DATASETS, and Get Data. The main area displays a table titled 'INSURANCE' with columns: insurance policies, customers, account ID, year ID, customer names, accounts, customer ID, month IDs, bridge accounts, and date ID. At the top, there are tabs for Insurance, Customers, Sale, and Q&A, with 'Sale' being the active tab.

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

NOTE: Each correct selection is worth one point.

Answer Area

A tenant administrator created a data classification that has shorthand of [answer choice.]

Customers
 Insurance
 Insurance Data
 Sale

The dashboard uses a dataset named [answer choice].

Customers
 Insurance
 Insurance Data
 Sale

Explanation:

Answer:

Answer Area

A tenant administrator created a data classification that has a shorthand of [answer choice.]

<input checked="" type="checkbox"/>	Customers
<input type="checkbox"/>	Insurance
<input type="checkbox"/>	Insurance Data
<input checked="" type="checkbox"/>	Sale

The dashboard uses a dataset named [answer choice].

<input checked="" type="checkbox"/>	Customers
<input type="checkbox"/>	Insurance
<input checked="" type="checkbox"/>	Insurance Data
<input type="checkbox"/>	Sale

Reference: <https://docs.microsoft.com/en-us/power-bi/service-data-classification>

Question: 163

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

Answer: D

Explanation:

Reference: <https://docs.microsoft.com/en-us/power-bi/desktop-directquery-about#power-bi-connectivity-modes>

Question: 164

You have an on-premises Power BI Report Server.

You plan to create a report in Power BI Desktop and publish the report to the report server. Which data source should the report use?

- A. Microsoft Azure SQL Database
- B. a Microsoft SQL Server database
- C. a Microsoft SQL Server Analysis Services (SSAS) database
- D. Microsoft Excel

Answer: C

Explanation:

Reference:

<https://docs.microsoft.com/en-us/power-bi/report-server/quickstart-create-powerbi-report>

<https://docs.microsoft.com/en-us/power-bi/report-server/connect-data-sources>

Question: 165

You have a Power BI app named App1. The privacy for the App1 workspace is set to Private.

A user named User1 reports that App1 does not appear in the My organization AppSource. App1 appears in the My organization AppSource for your account. You need to ensure that User sees App1 from the My organization AppSource. What should you do?

- A. From the app workspace, click Update app, configure the Content settings, and then click Update app.
- B. From the app workspace settings, add a member.
- C. From the app workspace, click Update app, configure the Access setting, and then click Update app.
- D. From the app workspace, share the dashboard.

Answer: C

Explanation:

Reference: <https://docs.microsoft.com/en-us/power-bi/service-organizational-content-pack-introduction#what-is-appsource>

Question: 166

You plan to embed multiple visualization in a public website.

Your Power BI infrastructure contains the visualizations configured as shown in the following table.

Visualization name	Characteristic
Visual1	Uses row-level security (RLS)
Visual2	Uses a dataset that is stored in Microsoft OneDrive for Business
Visual3	Contained in a report that was shared to your user account
Visual4	Is a custom visual
Visual5	Uses a dataset from an on-premises Microsoft SQL Server Analysis Services (SSAS) database

Which two visualizations can you embed into the website? Each correct answer presents a complete the solution.

NOTE: Each correct selection is worth one point.

- A. Visual1
- B. Visual2
- C. Visual3
- D. Visual4
- E. Visual5

Answer: B,D

Explanation:

Reference: <https://docs.microsoft.com/en-us/power-bi/service-publish-to-web>

Question: 167

You have a Power BI dashboard that displays different visualizations of company sales.

You enable Q&A on the dashboard.

You need to provide users with sample questions that they can ask when using Q&A. Which settings should you modify from the Power BI Settings?

- A. Subscriptions
- B. Dashboards
- C. Datasets

D. Workbooks

Answer: C

Explanation:

Reference: <https://docs.microsoft.com/en-us/power-bi/service-q-and-a-create-featured-questions>

Question: 168

You have an app workspace named Retail Analysis in the Power BI service. You need manage the members that have access to the app workspace.

What should you do?

- A. From the Power BI Admin portal, click Usage metrics.
- B. From the Office 365 Admin center, click Users.
- C. From the Office 365 Admin center, click Groups.
- D. From the Power BI Admin portal, click Tenant settings.

Answer: C

Explanation:

Reference: <https://docs.microsoft.com/en-us/power-bi/service-manage-app-workspace-in-power-bi- and-office-365>

Question: 169

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 two types of visualizations should you exclude from the report? Each correct answer presents part of the solution.

NOTE: Each correct selection is worth one point.

- A. Funnel charts
- B. Custom visuals
- C. Bubble maps
- D. Breadcrumbs
- E. R visuals

Answer: D,E

Explanation:

Reference: <https://powerbi.microsoft.com/en-us/guided-learning/reportserver-quickstart-powerbi-report/>

Question: 170

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 MonthJD that uses the yyyydd format.
- B. In the Monthly_returns table, create a new calculated column named DateJD that uses the ddmmmyyyy 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 [MonthJD]) DAX formula.

Answer: B

Explanation:

Reference:

<https://docs.microsoft.com/en-us/power-bi/desktop-create-and-manage-relationships>

Question: 171

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

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.TransformRows function.
- B. In the Store table query, use the Table.TransformRows function.
- C. In the Store table query, use the Table.TransformColumnTypes function.
- D. In the Order table query, use the Table.TransformColumnTypes function.

Answer: C

Explanation:

Question: 172

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 Microsoft Excel workbook that is saved to Microsoft SharePoint Online. The workbook contains several Power View sheets.

You need to recreate the Power View sheets as reports in the Power BI service.

Solution: Copy the workbook to Microsoft OneDrive for Business. From Excel, click Publish to Power BI, and then click Upload

Does this meet the goal?

- A. Yes
- B. No

Answer: B

Explanation:

Question: 173

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 Microsoft Excel workbook that is saved to Microsoft SharePoint Online. The workbook contains several Power View sheets.

You need to recreate the Power View sheets as reports in the Power BI service.

Solution: From the Power BI service, get the data from SharePoint Online, and then click Connect Does this meet the goal?

- A. Yes

B.No

Answer: B

Explanation:

We need to click "Import", not

"Connect". Reference:

<https://docs.microsoft.com/en-us/power-bi/service-excel-workbook-files>

Question: 174

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 query for a table named Sales. Sales has a column named CustomerID. The Data Type of CustomerID is Whole Number.

You refresh the data and find several errors. You discover that new entries in the Sales table contain nonnumeric values.

You need to ensure that nonnumeric values in the CustomerID column are set to 0. Solution: From Query Editor, select the CustomerID column and click Remove Errors. Does this meet the goal?

A. Yes

B.No

Answer: B

Explanation:

Question: 175

HOTSPOT

You have a Power BI model that has 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)

You plan to create the following measure.

Measure1 = DISTINCTCOUNT(Sales[ProductID])

You need to create the following relationships:

Sales to Product

Sales to

Salesperson

The solution must ensure that you can use Measure1 to display the count of products sold by each salesperson.

How should you configure the relationships? To answer, select the appropriate options in the answer area.

NOTE: Each correct selection is worth one point.

Cardinality:

▼
Many to One (*:1)
One to Many (1:*)
One to One (1:1)

Cross filter direction:

▼
Both
Single

Answer:

Explanation:

Cardinality:

▼
Many to One (*:1)
One to Many (1:*)
One to One (1:1)

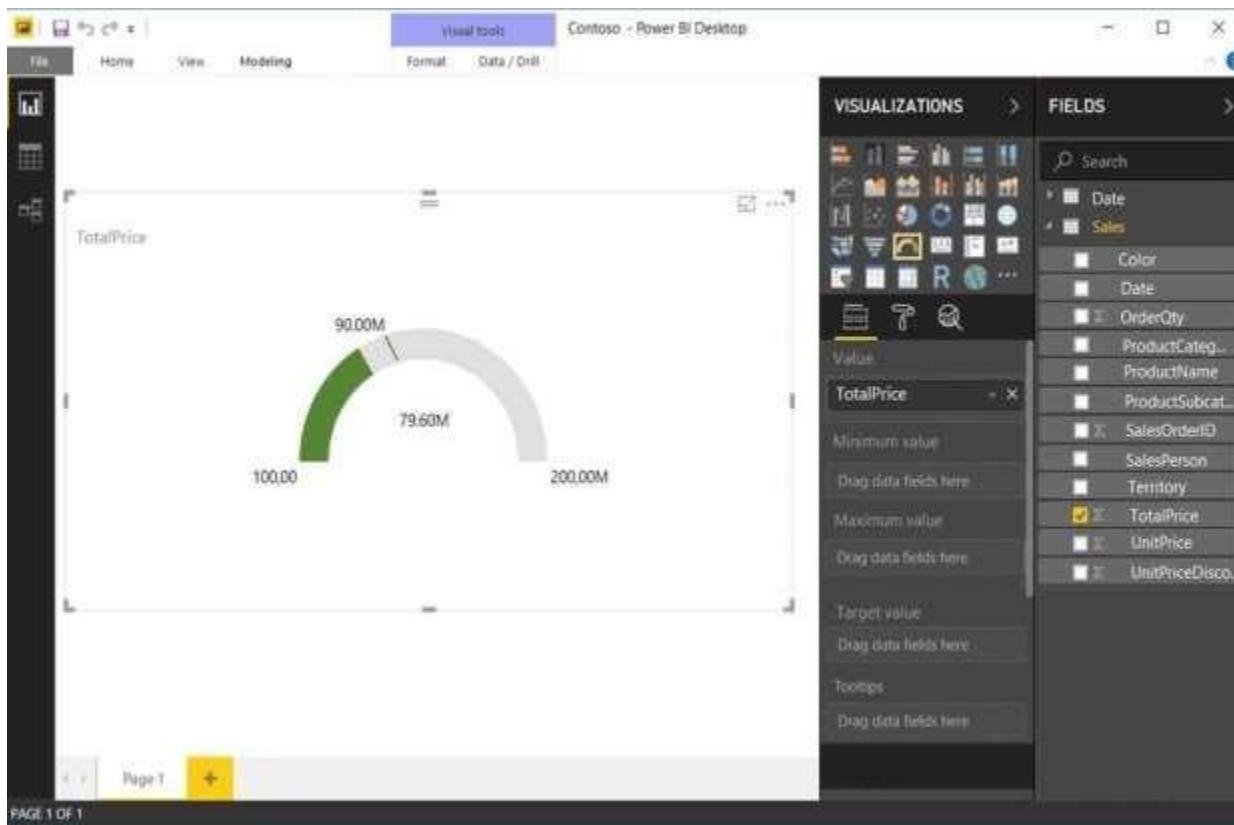
Cross filter direction:

▼
Both
Single

Question: 176

HOTSPOT

You have a report in Power BI Desktop as shown in the following exhibit.



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

Note: Each correct selection is worth one point.

The goal is set by using [answer choice].

a calculated measure
a DAX formula
the Format settings

To configure the visualization to display TotalPrice for the Territory of Canada always, you must add the Territory column to [answer choice].

the Tooltips field
the Values field
the Visual level filters field

Answer:

Explanation:

The goal is set by using [answer choice].

a calculated measure
a DAX formula
the Format settings

To configure the visualization to display TotalPrice for the Territory of Canada always, you must add the Territory column to [answer choice].

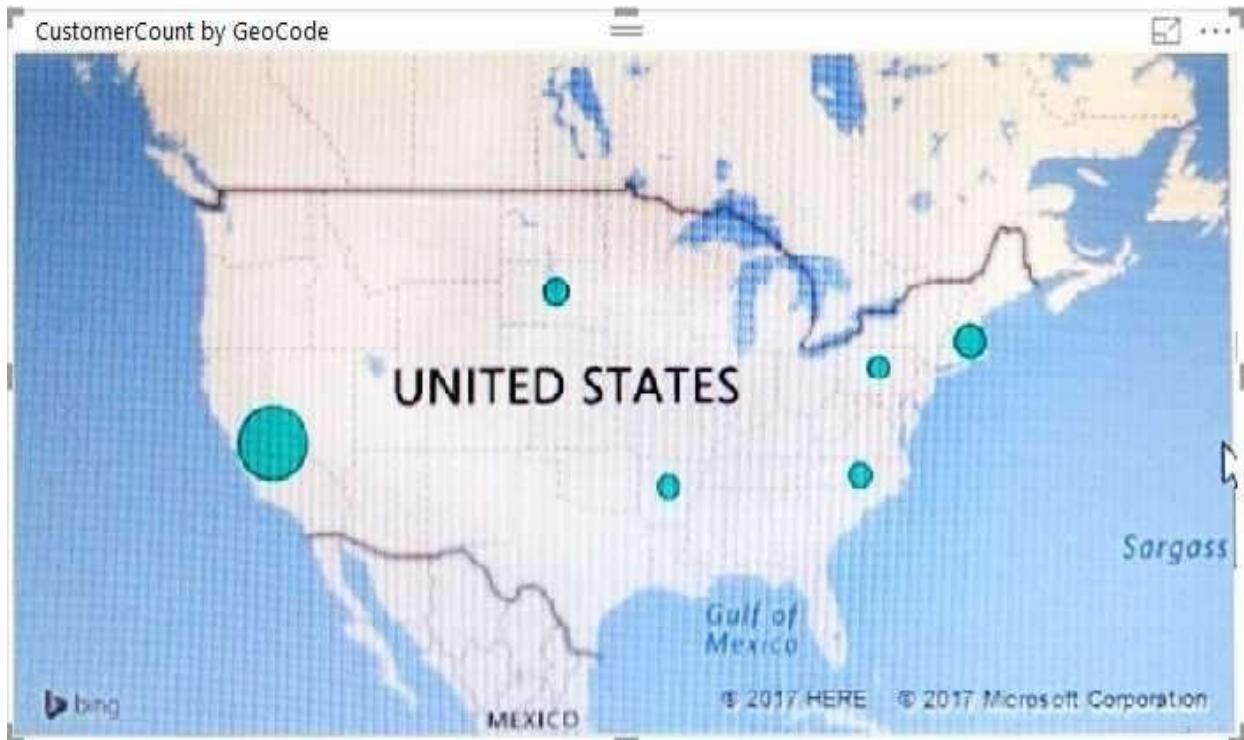
the Tooltips field
the Values field
the Visual level filters field

Question: 177

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:

Reference:

<https://docs.microsoft.com/en-us/power-bi/visuals/power-bi-map-tips-and-tricks>

Question: 178

DRAG DROP

You have a Power BI model that contains a table named Sales. Sales has the following three measures:

A measure named Total Sales Last Year that displays the sales from the previous calendar year. The current value is 32.89 million.

A measure named Total Sales This Year that displays the sales from the current calendar year. The current value is 11.69 million.

A measure named Total Sales Difference that uses a DAX formula of Sales[Last Year] – Sales[This Year].

You need to create the following visualization.



How should you configure the visualization? To answer, drag the appropriate measures to the correct fields. Each value may be used once, more than once, or not at all. You may need to drag the split bar between panes or scroll to view content.

NOTE: Each correct selection is worth one point.

Measures**Answer Area**

Value:

Maximum value:

Target value:

Answer:

Explanation:

Value:

Maximum value:

Target value:

Reference:

<https://docs.microsoft.com/en-us/power-bi/visuals/power-bi-visualization-radial-gauge-charts>

Question: 179

HOTSPOT

You are creating reports in Power BI Desktop. The model has the following tables.

Table name	Column name	Data type
Order	Order_date	Datetime
	Order_amount	Float
	Customer_ID	Integer
Customer	Customer_ID	Integer
	Full_name	Varchar(100)
	Customer_Photo	Binary

There is a relationship between the tables.

You plan to publish a report to the Power BI service that displays Order_amount by Order_date by Full_name.

You need to ensure that only the columns required for the report appear in Report View. The solution must minimize the size of the dataset that is published.

How should you configure the columns in Power BI Desktop? To answer, select the appropriate options in the answer area.

NOTE: Each correct selection is worth one point.

Customer_ID:

- From Query Editor, select the column and click Remove Columns.
- From Query Editor, select the column and click Remove Duplicates.
- From Query Editor, select the column and click Remove Other Columns.
- From the model, select the column and click Hide.

Customer_Photo:

- From Query Editor, select the column and click Remove.
- From Query Editor, select the column and click Remove Duplicates.
- From Query Editor, select the column and click Remove Other Columns.
- From the model, select the column and click Hide.

Explanation:

Answer:

Customer_ID:

- From Query Editor, select the column and click Remove Columns.
- From Query Editor, select the column and click Remove Duplicates.
- From Query Editor, select the column and click Remove Other Columns.
- From the model, select the column and click Hide.

Customer_Photo:

- From Query Editor, select the column and click Remove.
- From Query Editor, select the column and click Remove Duplicates.
- From Query Editor, select the column and click Remove Other Columns.
- From the model, select the column and click Hide.

Question: 180

HOTSPOT

You have a table that contains a column named Phone. The following is a sample of the data in the Phone column.

436-555-0160
385-555-0140
452-555-0179
290-555-0196
1 (11) 500 555-0122
128-555-0148
819-555-0186
996-555-0192
138-555-0156
556-555-0192

You need to add a new column that contains the data in the format of nnn-nnn-nnnn.

How should you complete the Query Editor formula? To answer, select the appropriate options in the answer area.

NOTE: Each correct selection is worth one point.

```
= Table.AddColumn(#"Previous Step", "Custom", each Text.
```

▼
Insert
Remove
Replace
ReplaceRange

(Text.

▼
At
End
Middle
Range

([Phone], 12), " ", "-"))

Answer:

Explanation:

```
= Table.AddColumn(#"Previous Step", "Custom", each Text.
```

▼
Insert
Remove
Replace
ReplaceRange

(Text.

▼
At
End
Middle
Range

([Phone], 12), " ", "-"))

Reference:

<https://docs.microsoft.com/en-us/powerquery-m/text-replace>

<https://docs.microsoft.com/en-us/powerquery-m/text-end>

Question: 181

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 Power BI model that contains two tables named Sales and Date. Sales contains four columns named TotalCost, DueDate, ShipDate, and OrderDate. Date contains one column named Date.

The tables have the following relationships:

Sales[DueDate] and Date[Date]

Sales[ShipDate] and Date[Date]

Sales[OrderDate] and Date[Date]

The active relationship is on Sales[DueDate].

You need to create measures to count the number of orders by [ShipDate] and the orders by [OrderDate]. You must meet the goal without duplicating data or loading additional data.

Solution: You create measures that use the CALCULATE, COUNT, and USERELATIONSHIP DAX functions.

Does this meet the goal?

- A. Yes
- B. No

Answer: A

Explanation:

Reference:

<https://docs.microsoft.com/en-us/dax/calculate-function-dax>

<https://docs.microsoft.com/en-us/dax/count-function-dax>

<https://docs.microsoft.com/en-us/dax/userrelationship-function-dax>