

PL-300 ANALYZING DATA WITH PBI UPDATED



Microsoft

| Power BI

Topic 1, Litware, Inc. Case Study

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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 yyyyymm. 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: 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")

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.

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])

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.

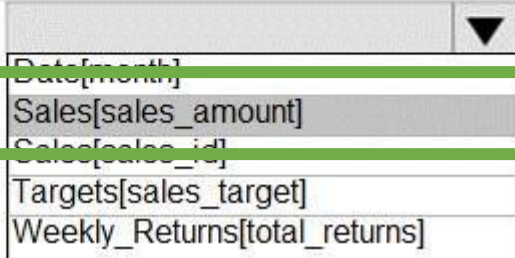
Reference: <https://docs.microsoft.com/en-us/dax/countrows-function-dax>

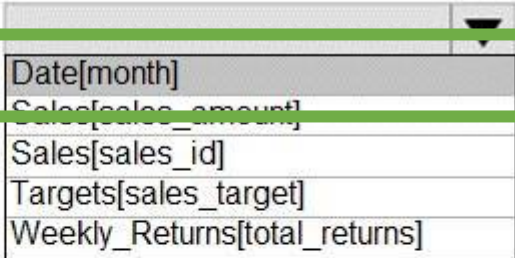
Question: 5

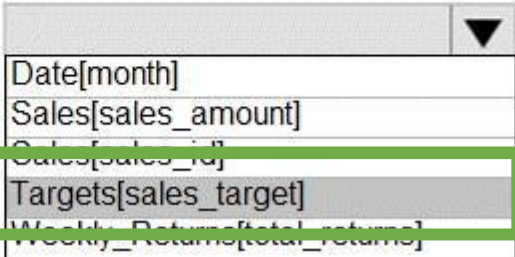
HOTSPOT

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.

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: 6

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.

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

Question: 7

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: 8

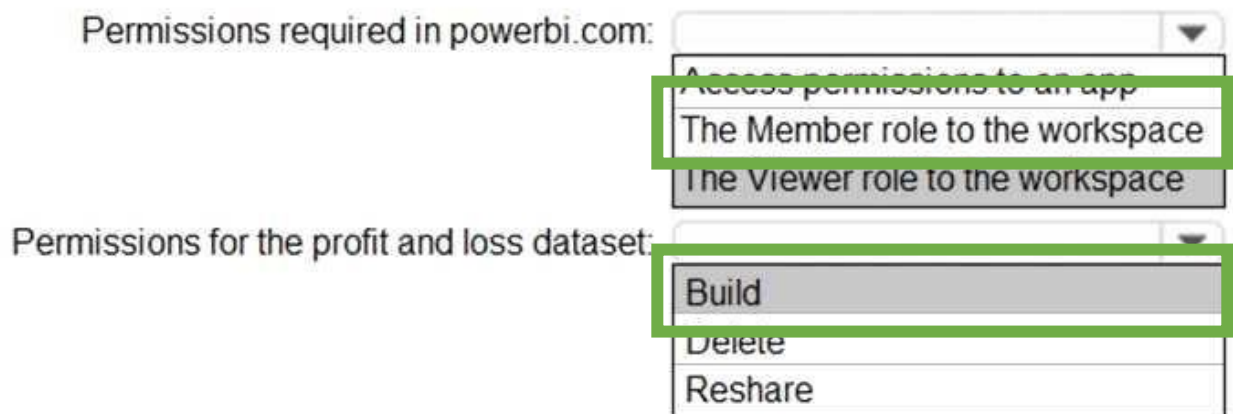
HOTSPOT

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.

Explanation:



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: 9

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

Question: 10

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
1	From powerbi.com, assign the analysts the Contributor role to the workspace.	4
2	From powerbi.com, add role members to the roles.	3
3	From Power BI Desktop, add a Table Filter DAX Expression to the roles.	5
4	From Power BI Desktop, create four roles.	2
5	From Power BI Desktop, publish the dataset to powerbi.com.	

Answer:

Explanation:



<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: 11

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

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

Question: 12

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]))

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>

Explanation/Reference:

Section:

Use the CALCULATE, the SUM, and the DATESQTD functions.

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

Syntax: DATESQTD(<dates>)

Note: 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.

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

Question: 13

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:

Grant access to:

Explanation:

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

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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	Forsterstr. 57	Mannheim	DE	68306	Germany	0621-08460
7	BLONP	Blondesdsi 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.

Topic 4, Misc. Questions

Question: 14

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.

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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

Question: 15

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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

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: 16

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

Explanation:

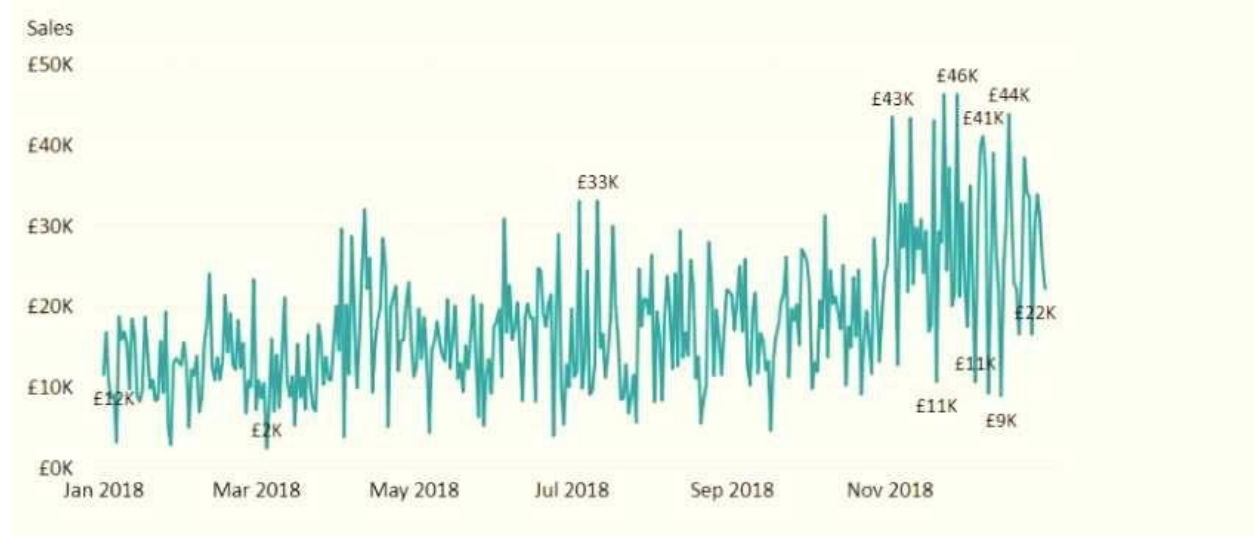
The filter is applied after the data is imported.

Instead add a WHERE clause to the SQL statement.

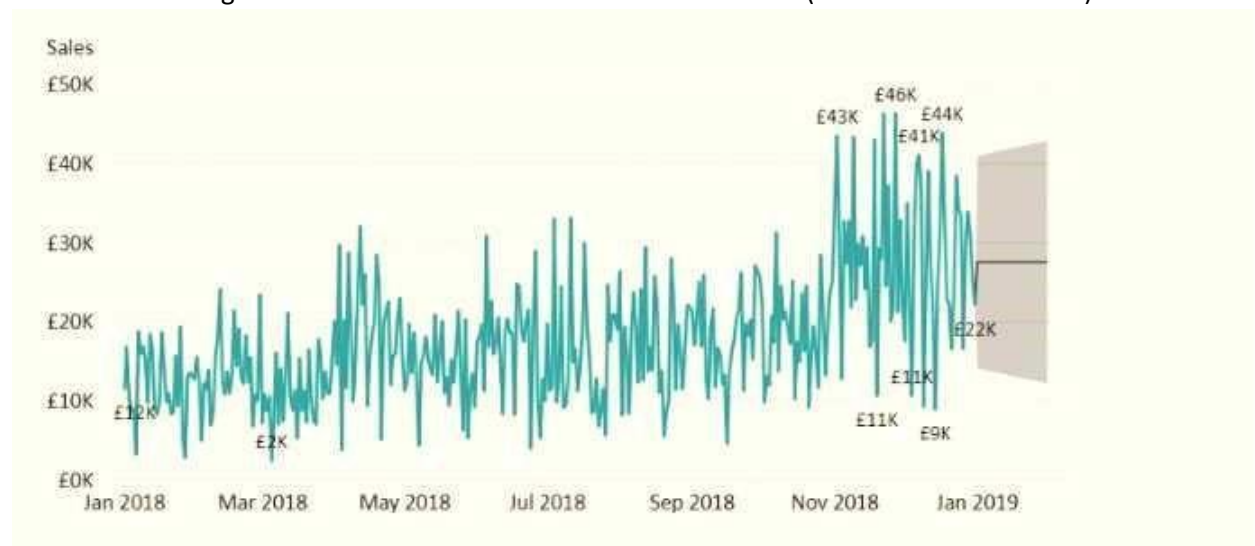
Reference: <https://docs.microsoft.com/en-us/power-bi/connect-data/service-gateway-sql-tutorial>

Question: 17

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:

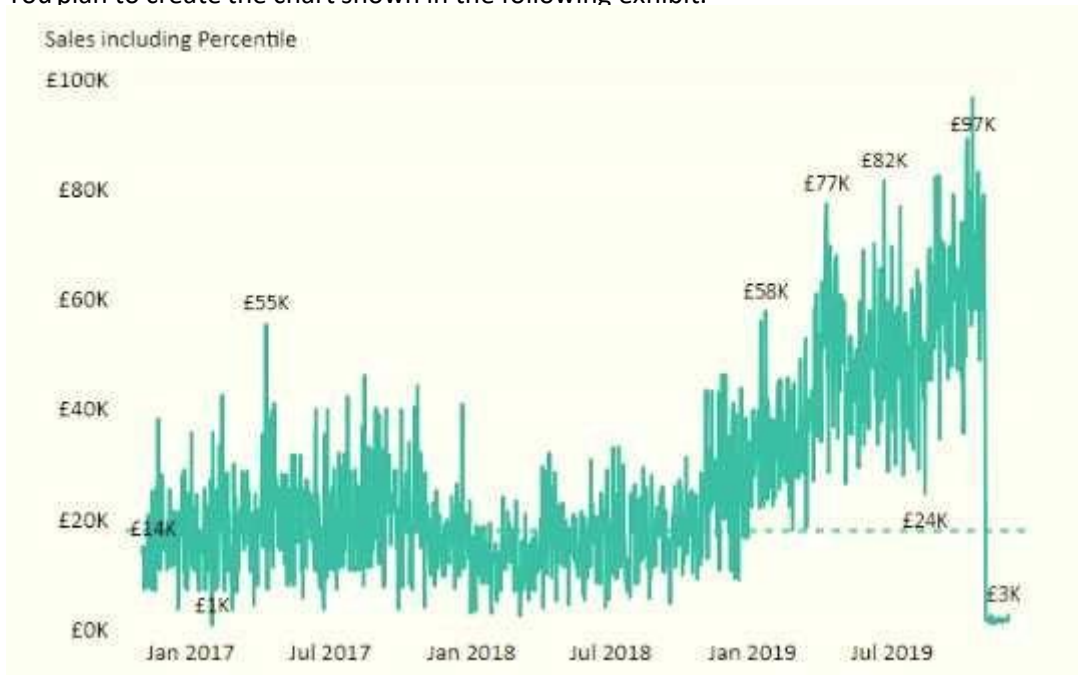
Explore forecast results by adjusting the desired confidence interval or by adjusting outlier data to see how they affect results.



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

Question: 18

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.
`Measures - PERCENTUEX.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.
`Measures = PERCENTILEX.INC (Sales,Sales[Total Sales],6.40)`

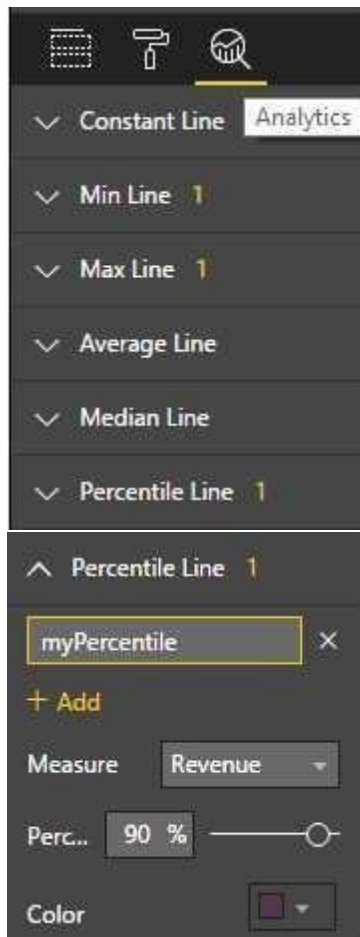
Answer: C

Explanation:

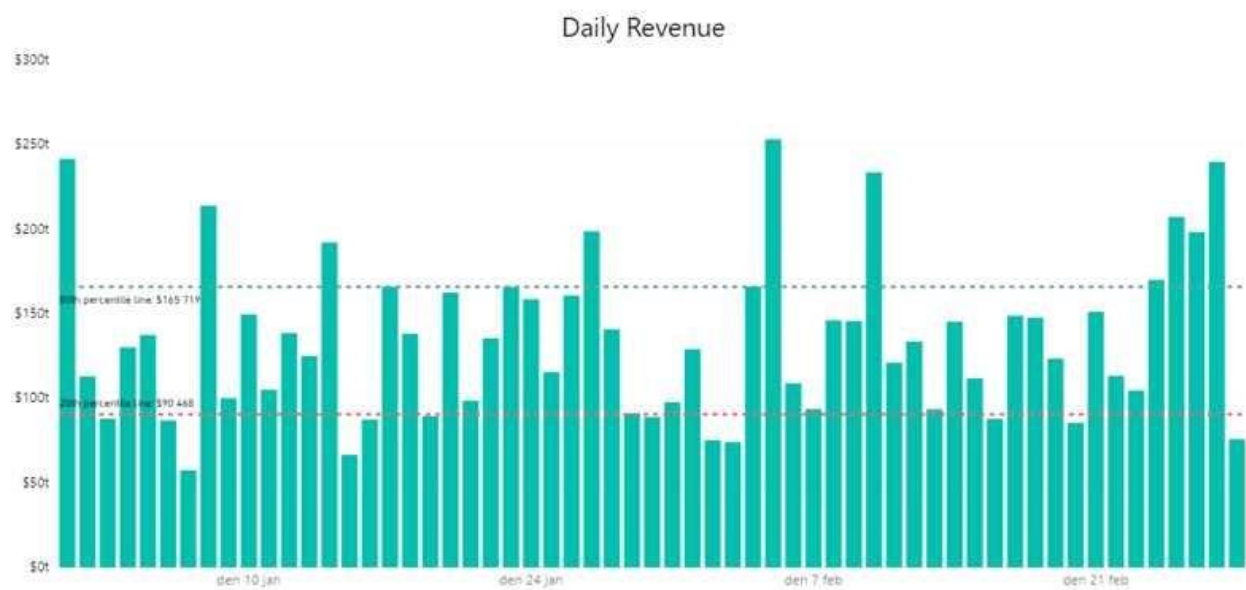
The analytics feature enables you to show percentiles across groups specified along a specific axis.

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: 19

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:

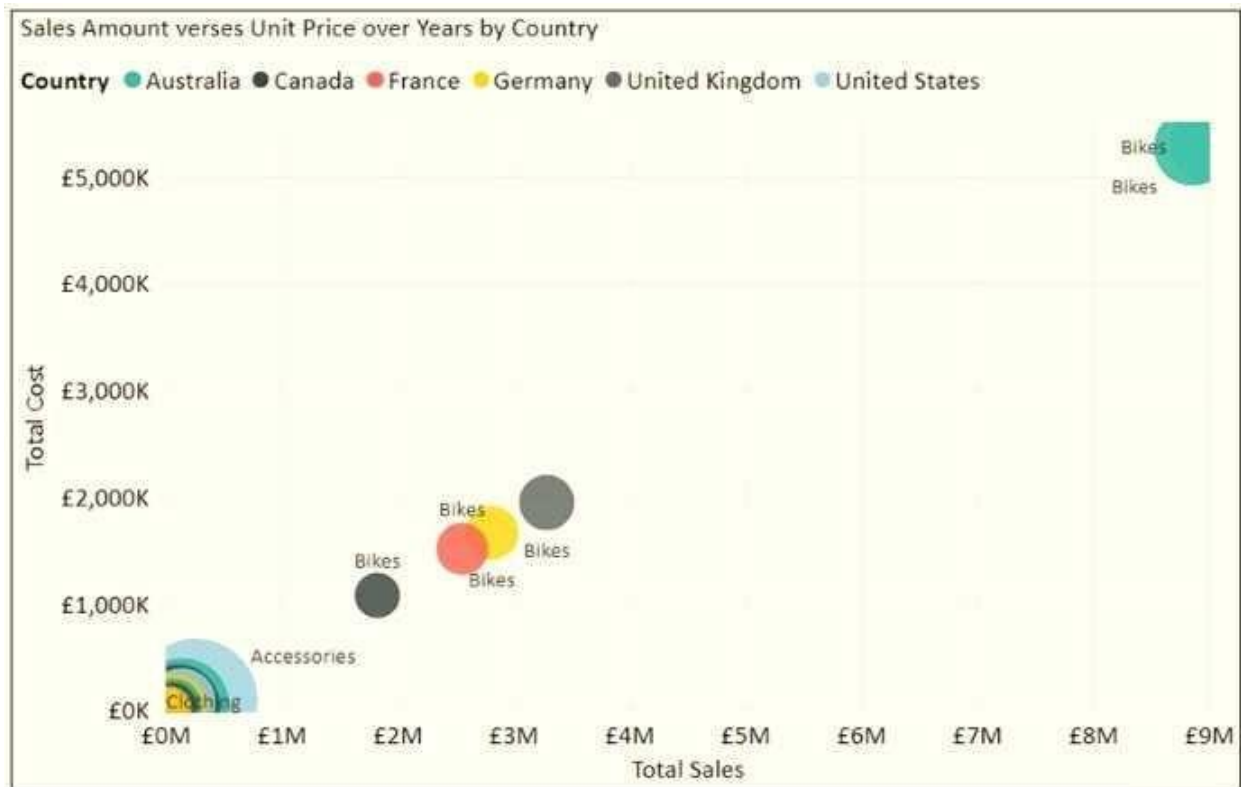
The best data for forecasting is time series data or uniformly increasing whole numbers. The line chart has to have only one line.

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-foroffice-365>

Question: 20

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: 21

HOTSPOT

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

MonthName	Total Sales	Sales Last Year	% Growth to Last Year
January	£359,263.79	£144,365.51	74.19%
February	£583,915.29	£215,923.28	63.02%
March	£684,091.92	£211,347.46	69.11%
April	£957,686.49	£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	£407,595.76	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 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: 22

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: 23

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 employeejd and employee_photo.

You need to optimize the data model

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

Answer Area

Employee_id:

Employee_photo:

Answer:

Explanation:

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: 24

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.

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 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"/>

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

Question: 25

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.

Question: 26

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: 27

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->

[directorysecurity-groups/ https://docs.microsoft.com/en-us/power-bi/guidance/rls-guidance](https://docs.microsoft.com/en-us/power-bi/guidance/rls-guidance)

Question: 28

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:

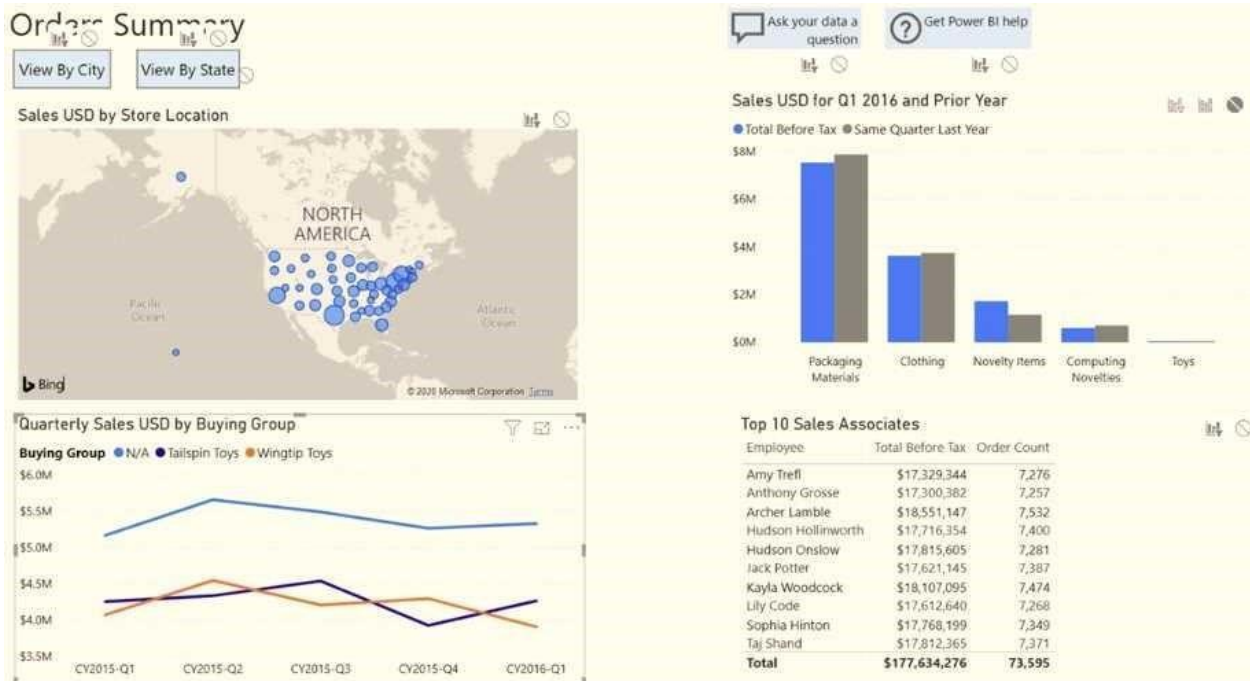
Note: Row-level security (RLS) with Power BI can be used to restrict data access for given users. Filters restrict data access at the row level, and you can define filters within roles. In the Power BI service, members of a workspace have access to datasets in the workspace. RLS doesn't restrict this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

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

Question: 29

HOTSPOT

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

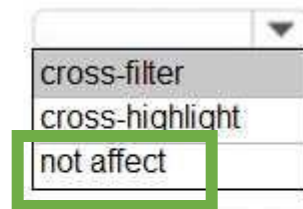


Use the drop-down menus to select the answer choice that completes each statement based on the information presented in the graphic. NOTE: Each correct selection is worth one point.

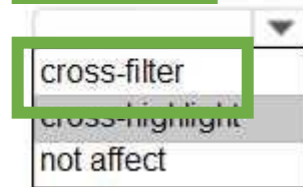
Answer:

Explanation:

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



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



Box 2: 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.

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

Question: 30

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.)



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: 31

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

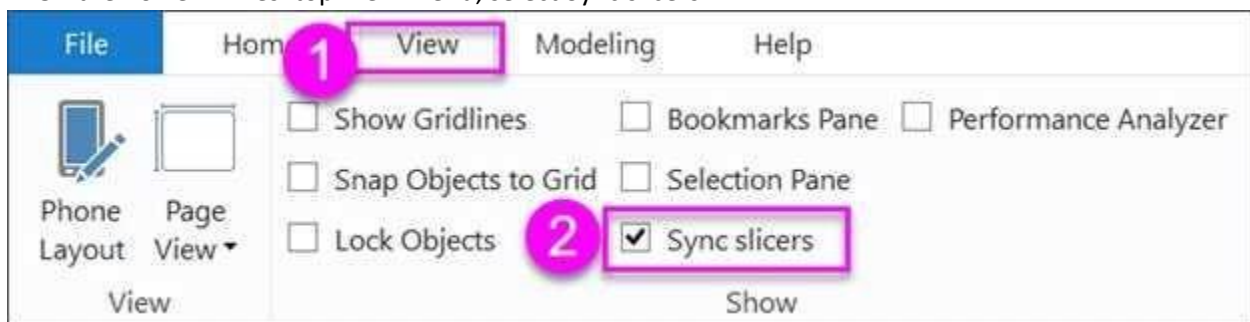
Explanation:

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

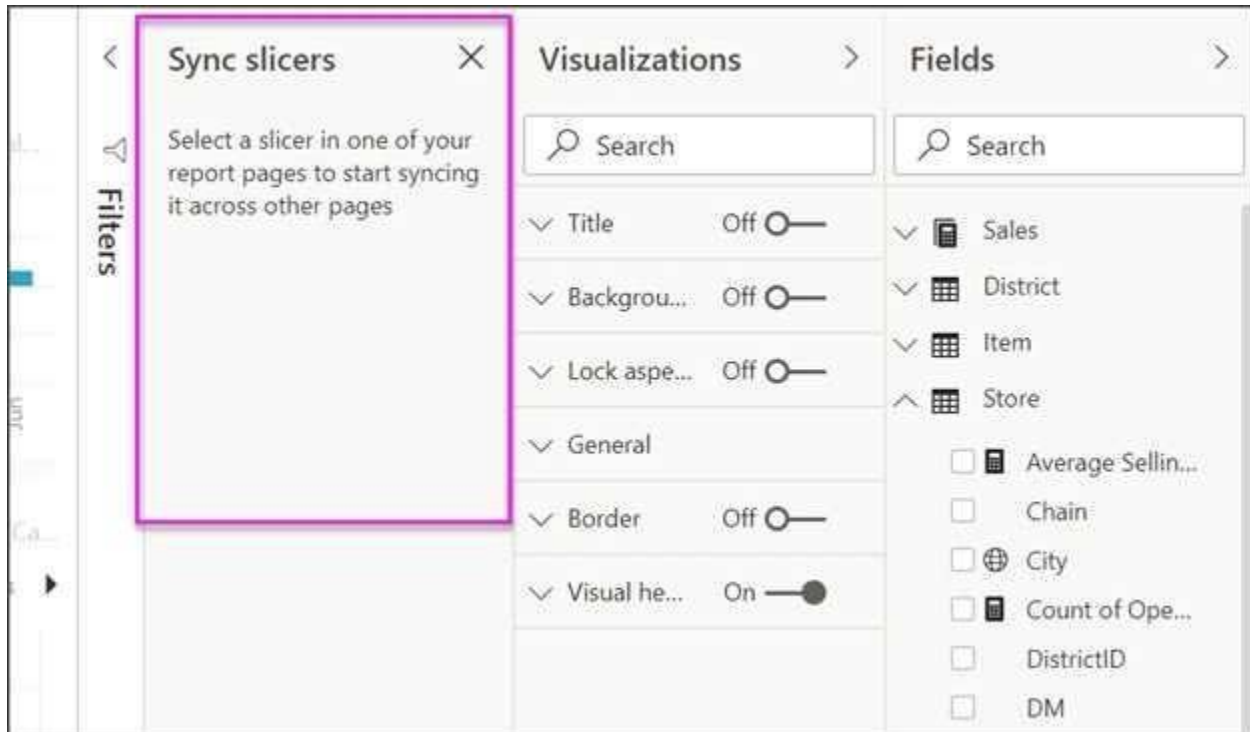
The visuals on the active page, and on all pages in the report, change to reflect the new filter.

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: 32

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: 33

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.

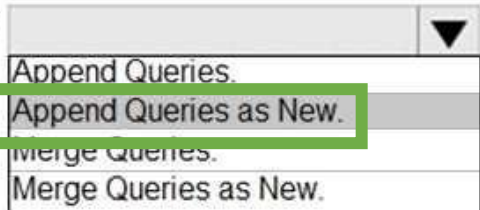
What should you do? To answer, select the appropriate options in the answer area.

NOTE: Each correct selection is worth one point.

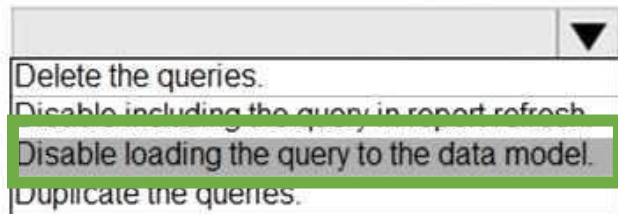
Answer:

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: 34

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

Question: 35

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.

	Column1	Column2	Column3	Column4	Column5	Column6
	Valid 100% Error 0% Empty 0%	Valid 100% Error 0% Empty 0%	Valid 100% Error 0% Empty 0%	Valid 100% Error 0% Empty 0%	Valid 100% Error 0% Empty 0%	Valid 100% Error 0% Empty 0%
1	Department	Product	2016	2017	2018	2019
2	Bikes	Carbon mountainbike	1002815	1006617	1007814	1007239
3	Bikes	Aluminium road bike	1007024	1001454	1005842	1007105
4	Bikes	Touring bike	1003676	1005171	1001669	1003244
5	Accessories	Bell	76713	10247	60590	25927
6	Accessories	Bottle holder	26690	29613	67955	71466
7	Accessories	Satnav	83189	40113	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

- 1 Select **Use Headers as First Row**.
- 2 Select Department and Product and **Unpivot Other Columns**.
- 3 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 Area

>
<

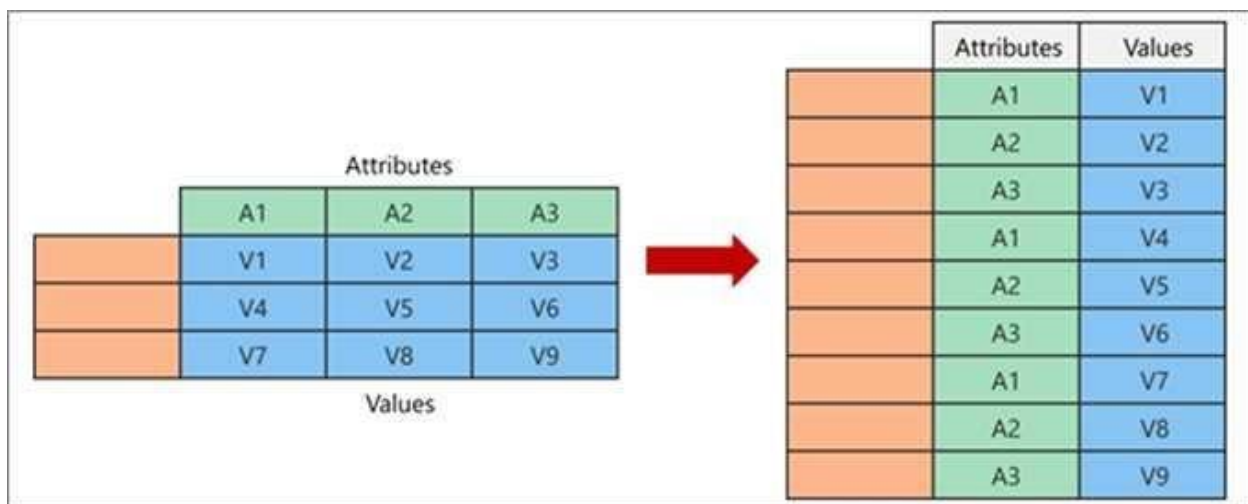
Answer:

Explanation:

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.



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-9ea1-49c1-9d95f588221c7098>

Question: 36

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: 37

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.

Question: 38

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.

Question: 39

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: 40

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: 41

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:

Cardinality:

Cross-filter direction:

Box 1: One-to-many

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

Question: 42

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: 43

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: 44

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. 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: 45

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
1	Pin items from the reports to the dashboard.		
4	Rearrange, resize, or remove items from the phone view.		
3	Change the dashboard view to Phone view .	⬅	⬆
2	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.

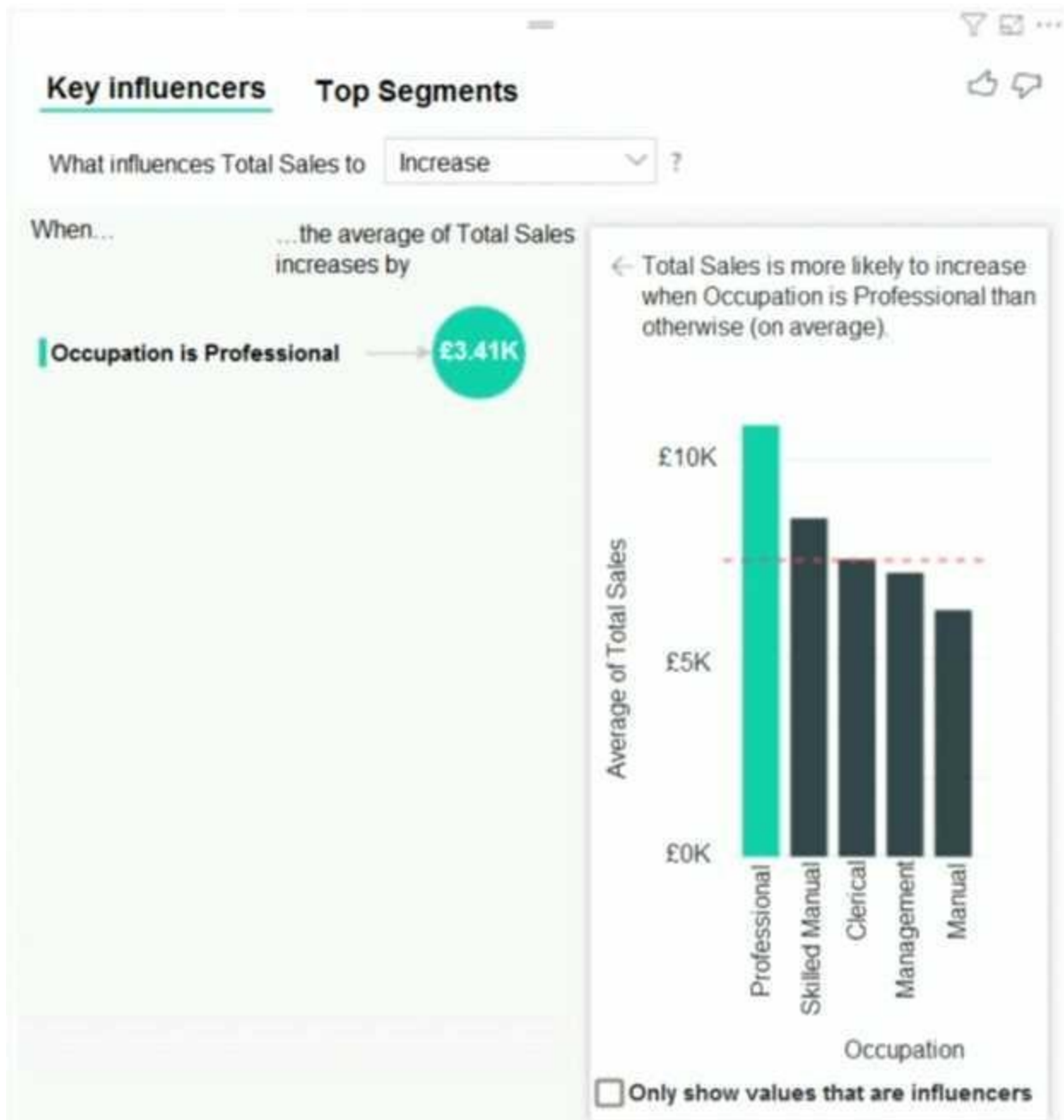
Question: 46

HOTSPOT

You have a table that contains the following three columns:

City
Total Sales
Occupation

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.

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>

[-bi-top-10-filters/](#)

Question: 47

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: 48

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: 49

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

Question: 50

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

Question: 51

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: 52

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: 53

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-introducingnew-capabilities/>

Question: 54

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: 55

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.

	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-9ea1-49c1-9d95f588221c7098>

Question: 56

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 =

STARTOFYEAR (PREVIOUSYEAR ('Date' [Date]))

VAR enddate =

LASTDATE (Sales[Date]) - 365

RETURN

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

Question: 57

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

Question: 58

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: A

Explanation:

Question: 59

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: 60

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: 61

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 crossfiltering honors the RLS settings.

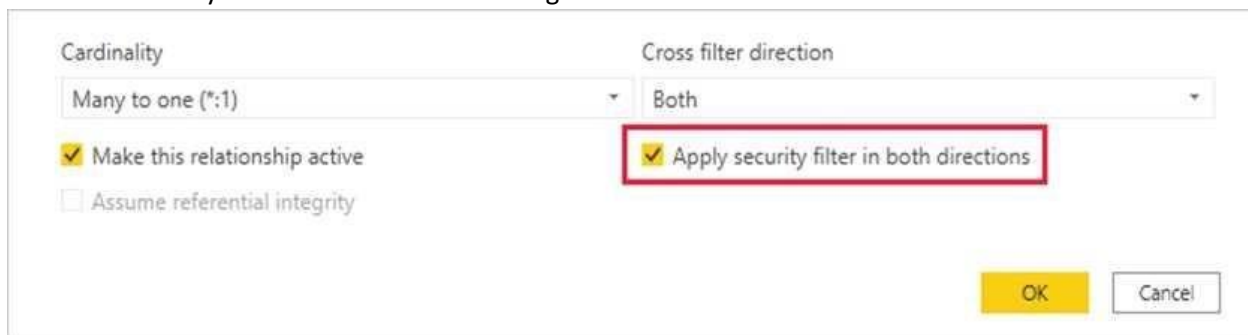
What should you do?

- 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.



Cardinality: Many to one (*:1)

Cross filter direction: Both

☒ Make this relationship active

☐ Assume referential integrity

☒ Apply security filter in both directions

OK Cancel

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

Case Study

Overview

Contoso, Ltd. is a manufacturing company that produces sports equipment. Contoso holds quarterly board meetings for which financial analysts manually prepare Microsoft Excel reports, including balance sheets and profit and loss statements for each of the company's four business units.

Existing Environment

Data and Sources

Data for the reports comes from the sources shown in the following table.

Data type	Description
Azure SQL database	Detailed revenue, cost, and expense data Uses a public endpoint
Microsoft Dynamics 365 Business Central	Summary balance sheet data and product catalog data

The balance sheet data is unrelated to the profit and loss results other than they both relate to dates.

Balance Sheet Data

The balance sheet data is imported and includes the final monthly balances of each account 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

The balance sheet data always includes a row for each account for each month.

Product Catalog Data

The product catalog shows how products roll up to product categories, which roll up to the business units. The product list is provided in the format shown in the following table.

Product ID	Product name	Product description	Product category	Business unit
HL-U509-R	Sport-100 Helmet, Red	Universal fit, well-vented, lightweight, snap-on visor	Accessories	Unit A
RA-H123	Hitch Rack - 4-Bike	Carries four bikes securely, steel construction, fits a 2-inch receiver hitch	Accessories	Unit A
BK-M18S-40	Mountain-500 Silver, 40	Suitable for any type of riding, on- or off-road, fits any budget, smooth-shifting with a comfortable ride	Bikes	Unit B
FD-2342	Front Derailleur	Wide-link design	Components	Unit A

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.

Requirements

Planned Changes

Contoso plans to automate and standardize the quarterly reporting process by using Power BI. The company wants to reduce how long it takes to populate the reports to less than two days. The company wants to create common logic for the business units, products, and departments. The logic will 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 minimum manual effort.

The company wants to provide the board with a single package of reports that will contain 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. An Azure Active Directory (Azure AD) group will be used to share information with the board. Contoso identifies the following security requirements for analyst access:

- Analysts must be able to access all balance sheet and product catalog data.
- Analysts must be able to access only the profit and loss data of their respective business unit.
- Analysts must be able to create new reports from the dataset that contains the profit and loss data, but the reports built by the analysts must NOT be included in the quarterly reports for the board.
- Analysts must NOT be able to share the quarterly reports with anyone.
- Analysts must NOT be able to make new reports by using the balance sheet data.

Report Requirements

You plan to relate the balance sheet table to a 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. The date table will contain the columns shown in the following table.

Column name	Data type	Sample value
Date	Date	4-Apr-2020
Month	Integer	202004
Month Name	Text	February
Quarter	Integer	20202
Year	Integer	2020

The definitions and attributes for the products, departments, and business units must be consistent across all the reports. The board must be able to get the following information from the quarterly reports:

- Revenue trends over time
 - The ending balances of each account
 - Changes in long-term liabilities from the previous quarter
 - The percent of total revenue contributed by each product category
 - A comparison of quarterly revenue versus the same quarter from the previous year
- The reports must be updated with the latest data by 5 AM each day.

QUESTION 62

You need to ensure that the data is updated to meet the report requirements. The solution must minimize configuration effort. What should you do?

- A. From each report in powerbi.com, select Refresh visuals.
- B. From Power BI Desktop, download the PBIX file and refresh the data.
- C. Configure a scheduled refresh without using an on-premises data gateway.**
- D. Configure a scheduled refresh by using an on-premises data gateway.

QUESTION 63

You need to update the Power BI model to ensure that the analysts can quickly build drill-downs from business unit to product in a visual. What should you create?

- A. a group

- B. a calculated table
- C. **a hierarchy**
- D. a calculated column

Correct Answer: C

Explanation

Explanation/Reference:

Section:

Drill requires a hierarchy.

When a visual has a hierarchy, you can drill down to reveal additional details.

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

QUESTION 64

You need to create the relationship between the product list and the revenue results.

The solution must minimize the time it takes to render visuals. What should you set as the relationship cardinality?

- A. One to one
- B. Many to many
- C. Many to one
- D. **One to many**

Correct Answer: D

Explanation

Explanation/Reference:

Section:

One product in the product list can occur many times in the revenue results. Note 1: One to many (1:*) : In a one-to-many relationship, the column in one table has only one instance of a particular value, and the other related table can have more than one instance of a value.

Note 2:

Revenue data is provided at the date and product level.

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

Revenue trends over time

The percent of total revenue contributed by each product category A comparison of quarterly revenue versus the same quarter from the previous year [https:// docs.microsoft.com/en-us/power-bi/transform-model/desktop-create-and-manage-relationships](https://docs.microsoft.com/en-us/power-bi/transform-model/desktop-create-and-manage-relationships)

QUESTION 65

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. Select and Place:

Actions

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

Answer Area

- From Power BI Desktop, create four roles.
- From Power BI Desktop, add a Table Filter DAX Expression to the roles.
- From powerbi.com, add role members to the roles.
- From Power BI Desktop, publish the dataset to powerbi.com.

Explanation/Reference:

Section:

Step 1: From BI Desktop, create four roles

You can define roles and rules within Power BI Desktop.

Step 2: From BI Desktop, add a Table Filter DAX Expression to the roles.

To define security roles, follow these steps.

1. From the Modeling tab, select Manage Roles.
2. Select Manage Roles
3. From the Manage roles window, select Create.
4. Select Create
5. Under Roles, provide a name for the role.
6. Under Tables, select the table to which you want to apply a DAX rule.
7. In the Table filter DAX expression box, enter the DAX expressions. This expression returns a value of true or false. For example: [Entity ID] = ?Value?.

After you've created the DAX expression, select the checkmark above the expression box to validate the expression.

8. Select Save.

Step 3: From powerbi.com, add role members to the roles.

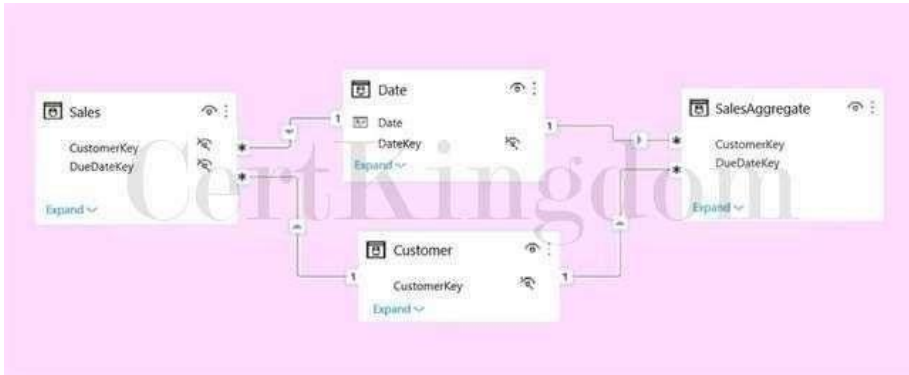
You can't assign users to a role within Power BI Desktop. You assign them in the Power BI service. Step 4: From BI Desktop, publish the dataset to powerbi.com Now that you're done validating the roles in Power BI Desktop, go ahead and publish your report to the Power BI service.

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

QUESTION 67

HOTSPOT

You plan to create the Power BI model shown in the exhibit. (Click the Exhibit tab.)



The data has the following refresh requirements:

Customer must be refreshed daily.

Date must be refreshed once every three years.

Sales must be refreshed in near real time.

SalesAggregate must be refreshed once per week.

You need to select the storage modes for the tables. The solution must meet the following requirements: Minimize the load times of visuals.

Ensure that the data is loaded to the model based on the refresh requirements. Which storage mode should you select for each table? To answer, select the appropriate options in the answer area.

NOTE: Each correct selection is worth one point. Hot Area:

Answer Area

Customer:	<div><div></div><div>DirectQuery</div><div>Dual</div><div>Import</div></div>
Date:	<div><div></div><div>DirectQuery</div><div>Dual</div><div>Import</div></div>
Sales:	<div><div></div><div>DirectQuery</div><div>Dual</div><div>Import</div></div>
SalesAggregate:	<div><div></div><div>DirectQuery</div><div>Dual</div><div>Import</div></div>

Answer Area

Customer:

	▼
DirectQuery	
Dual	
Import	

Date:

	▼
DirectQuery	
Dual	
Import	

Sales:

	▼
DirectQuery	
Dual	
Import	

SalesAggregate:

	▼
DirectQuery	
Dual	
Import	

Correct Answer: A**Explanation****Explanation/Reference:**

Section:

Box 1: Dual

Customer should use the dual storage mode.

Dual: Tables with this setting can act as either cached or not cached, depending on the context of the query that's submitted to the Power BI dataset. In some cases, you fulfill queries from cached data. In other cases, you fulfill queries by executing an on-demand query to the data source. Note: You set the Storage mode property to one of these three values: Import, DirectQuery, and Dual.

Box 2: Dual

You can set the dimension tables (Customer, Geography, and Date) to Dual to reduce the number of limited relationships in the dataset, and improve performance.

Box 3: DirectQuery

Sales should use the DirectQuery storage mode.

DirectQuery: Tables with this setting aren't cached. Queries that you submit to the Power BI dataset—for example, DAX queries—and that return data from DirectQuery tables can be fulfilled only by executing on-demand queries to the data source. Queries that you submit to the data source use the query language for that data source, for example, SQL.

Box 4: Import

Import: Imported tables with this setting are cached. Queries submitted to the Power BI dataset that return data from Import tables can be fulfilled only from cached data.
<https://docs.microsoft.com/en-us/power-bi/transform-model/desktop-storage-mode>

QUESTION 68

You have a project management app that is fully hosted in Microsoft Teams. The app was developed by using Microsoft Power Apps. You need to create a Power BI report that connects to the project management app. Which connector should you select?

- A. Microsoft Teams Personal Analytics
- B. SQL Server database
- C. **Dataverse**
- D. Dataflows

Correct Answer: C

Explanation

Explanation/Reference:

Section:

Data sources in Power BI Desktop.

The Power Platform category provides the following data connections:

Power BI datasets

Power BI dataflows

Common Data Service (Legacy)

Dataverse

Dataflows

Other data sources include Microsoft Teams Personal Analytics (Beta).

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

QUESTION 69

For the sales department at your company, you publish a Power BI report that imports data from a Microsoft Excel file located in a Microsoft SharePoint folder. The data model contains several measures. You need to create a Power BI report from the existing data. The solution must minimize development effort. Which type of data source should you use?

A. **Power BI dataset**

- B. a SharePoint folder
- C. Power BI dataflows
- D. an Excel workbook

QUESTION 70 DRAG DROP

In Power Query Editor, you have three queries named ProductCategory, ProductSubCategory, and Product.

Every Product has a ProductSubCategory.

Not every ProductSubCategory has a parent ProductCategory. You need to merge the three queries into a single query. The solution must ensure the best performance in Power Query. How should you merge the tables? To answer, drag the appropriate merge types to the correct queries. Each merge type 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.

Select and Place:

The image shows two screenshots of the Power Query Merge dialog box. The first screenshot shows the 'Join kinds' list on the left and the 'Answer Area' on the right. The 'Answer Area' contains two boxes: 'Inner' and 'Left outer'. The 'Join kinds' list includes: Full outer, Inner, Left anti, Left outer, Right anti, and Right outer. The 'Answer Area' also shows a table with columns 'Left Table', 'Right Table', and 'Join Kind'. The table contains two rows: 'Product' joined with 'ProductSubCategory' using 'Join kind', and 'ProductSubCategory' joined with 'ProductCategory' using 'Join kind'. The second screenshot shows the same dialog box, but the 'Answer Area' now contains two boxes: 'Inner' and 'Left outer'. The 'Join kinds' list remains the same. The table in the 'Answer Area' is identical to the first screenshot.

Correct Answer: A

Explanation

Explanation/Reference:

Section:

Box 1: Inner

Every Product has a ProductSubCategory.

A standard join is needed.

One of the join kinds available in the Merge dialog box in Power Query is an inner join, which brings in only matching rows from both the left and right tables.

Box 2: Left outer

Not every ProductSubCategory has a parent ProductCategory. One of the join kinds available in the Merge dialog box in Power Query is a left outer join, which keeps all the rows from the left table and brings in any matching rows from the right table.

<https://docs.microsoft.com/en-us/power-query/merge-queries-inner>
<https://docs.microsoft.com/en-us/power-query/merge-queries-left-outer>

QUESTION 71

HOTSPOT

You need to create a measure that returns the percent of revenue by product category. How should you complete the measure? To answer, select the appropriate options in the answer area.

NOTE: Each correct selection is worth one point.

Hot Area:

```
Category Revenue Contribution =
VAR AllCategoryRev =
```

	▼	(SUM ([Revenue]),
ALL		
ALLEXCEPT		
CALCULATE		
DIVIDE		
FILTER		

	▼	(ProductList[ProductCategory]))
ALL		
ALLEXCEPT		
CALCULATE		
DIVIDE		
FILTER		

```
RETURN
```

	▼	(SUM([Revenue]), AllCategoryRev)
ALL		
ALLEXCEPT		
CALCULATE		
DIVIDE		
FILTER		

Explanation

Explanation/Reference:

Section:

Box 1: CALCULATE

CALCULATE evaluates an expression in a modified filter context. Syntax: CALCULATE(<expression>[, <filter1> [, <filter2> [, ?]]]) Box 2: REMOVEFILTERS REMOVEFILTERS clear filters from the specified tables or columns.

Box 3: DIVIDE

DIVIDE performs a division.

Example: MEASURE FactInternetSales[%Sales] = DIVIDE([TotalSales], CALCULATE ([TotalSales],REMOVEFILTERS()))

Note: The RETURN keyword consumes variables defined in previous VAR statements.
<https://docs.microsoft.com/en-us/dax/calculate-function-dax> <https://docs.microsoft.com/en-us/dax/removefilters-function-dax> <https://dax.guide/st/return/>

QUESTION 72

You are creating a report in Power BI Desktop.

You load a data extract that includes a free text field named coll. You need to analyze the frequency distribution of the string lengths in col1. The solution must not affect the size of the model. What should you do?

- A. In the report, add a DAX calculated column that calculates the length of col1
- B. In the report, add a DAX function that calculates the average length of col1
- C. From Power Query Editor, add a column that calculates the length of col1
- D. **From Power Query Editor, change the distribution for the Column profile to group by length for col1**

QUESTION 73

You have a Power BI query named Sales that imports the columns shown in the following table.

Name	Description	Sample value
ID	A unique value that represents a sale	10253
Sale_Date	Sales date A column to extract the date of the sale	2021-11-23T09:53:00
Customer_ID	Represents a unique customer ID number	13158
Delivery_Time	Elapsed delivery time in hours Can contain null values	51.52
Status	Sales status Contains only the following two values: Finished and Canceled	Finished
Canceled_Date	Cancellation date and time Can contain null values	2021-11-24T14:11:23

Users only use the date part of the Sales_Date field. Only rows with a Status of Finished are used in analysis. You need to reduce the load times of the query without affecting the analysis. Which two actions achieve this goal? Each correct answer presents a complete solution. NOTE: Each correct selection is worth one point.

- A. **Remove the rows in which Sales[Status] has a value of Canceled.**
- B. Remove Sales[Sales_Date].
- C. Change the data type of Sale[Delivery_Time] to Integer.
- D. **Split Sales[Sale_Date] into separate date and time columns.**
- E. Remove Sales[Canceled Date].

Correct Answer: AD

Explanation**Explanation/Reference:**

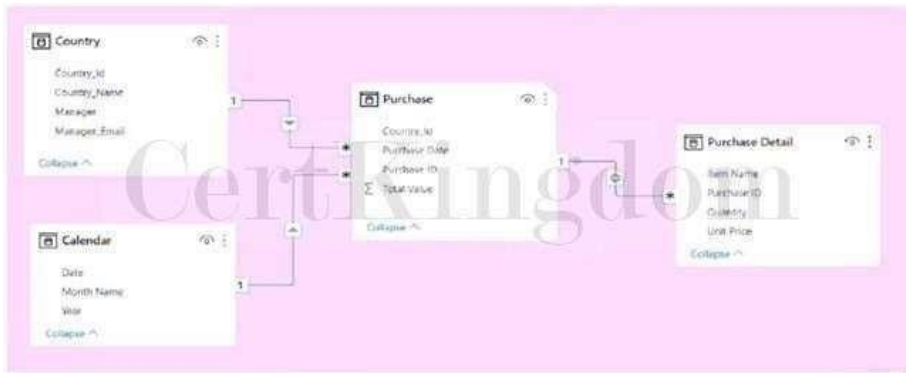
Section:

A: Removing uninteresting rows will increase query performance.

D: Splitting the Sales_Date column will make comparisons on the Sales date faster.

QUESTION 74

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



A manager can represent only a single country.

You need to use row-level security (RLS) to meet the following requirements:

The managers must only see the data of their respective country.

The number of RLS roles must be minimized.

Which two actions should you perform? Each correct answer presents a complete solution.

NOTE: Each correct selection is worth one point.

- A. Create a single role that filters Country[Manager_Email] by using the USERNAME DAX function.
- B. Create a single role that filters Country[Manager_Email] by using the USEROBJECTID DAX function.
- C. For the relationship between Purchase Detail and Purchase, select Apply security filter in both directions.
- D. Create one role for each country.
- E. For the relationship between Purchase and Purchase Detail, change the Cross filter direction to Single.

Correct Answer: AC

Explanation**Explanation/Reference:**

Section:

A: You can take advantage of the DAX functions `username()` or `userprincipalname()` within your dataset. You can use them within expressions in Power BI Desktop. When you publish your model, it will be used within the Power BI service.

Note: To define security roles, follow these steps.

Import data into your Power BI Desktop report, or configure a DirectQuery connection.

1. From the Modeling tab, select Manage Roles.
2. From the Manage roles window, select Create.
3. Under Roles, provide a name for the role.
4. Under Tables, select the table to which you want to apply a DAX rule.
5. In the Table filter DAX expression box, enter the DAX expressions. This expression returns a value of true or false. For example: `[Entity ID] = ?Value?`.
6. After you've created the DAX expression, select the checkmark above the expression box to validate the expression.

Note: You can use `username()` within this expression.

7. Select Save.

C: 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.

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

QUESTION 75

HOTSPOT

You have a Power BI model that contains a table named Sales and a related date table. Sales contains a measure named Total Sales.

You need to create a measure that calculates the total sales from the equivalent month of the previous year. How should you complete the calculation? To answer, select the appropriate options in the answer area.

NOTE: Each correct selection is worth one point. Hot Area:

Sales Previous Year =

	▼
CALCULATE	
EVALUATE	
SUM	
SUMX	

[Total Sales],

	▼
DATESMTD	
PARALLELPERIOD	
SAMEPERIODLASTYEAR	
TOTALMTD	

(

	▼
[Date]	
'Date' [Date]	
'Date' [Month]	

)

Explanation/Reference:

Section:

Box 1: CALCULATE

Box 2: PARALLELPERIOD

PARALLELPERIOD returns a table that contains a column of dates that represents a period parallel to the dates in the specified dates column, in the current context, with the dates shifted a number of intervals either forward in time or back in time.

Syntax: PARALLELPERIOD(<dates>,<number_of_intervals>,<interval>) dates: A column that contains dates.

interval: The interval by which to shift the dates. The value for interval can be one of the following: year, quarter, month.

Incorrect:

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.

Syntax: SAMEPERIODLASTYEAR(<dates>)

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

Syntax: DATESMTD(<dates>) Box 3: 'DATE' [Month]

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

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

QUESTION 76**DRAG DROP**

You plan to create a report that will display sales data from the last year for multiple regions. You need to restrict access to individual rows of the data on a per region-basis by using roles. 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. Select and Place:

Actions

- 1 Publish the report.
- 2 Assign users to the role.
- 3 Add a filter to the report.
- 4 Create a role definition.
- 5 Import the data to Power BI Desktop.

Answer Area

- 4
- 3
- 1
- 2

Actions

Add a filter to the report.

Answer Area

- 1 Import the data to Power BI Desktop.
- 2 Create a role definition.
- 3 Assign users to the role.
- 4 Publish the report.

Correct Answer: A

Explanation

Explanation/Reference:

Section:

You can define roles and rules within Power BI Desktop. When you publish to Power BI, it also publishes the role definitions. To define security roles, follow these steps.

1. Import data into your Power BI Desktop report (Step 1)
2. From the Modeling tab, select Manage Roles.
3. From the Manage roles window, select Create. (Step 2)
4. Under Roles, provide a name for the role.
5. Under Tables, select the table to which you want to apply a DAX rule.
6. In the Table filter DAX expression box, enter the DAX expressions. This expression returns a value of true or false. For example: [Entity ID] = ?Value?(Step 3)
7. After you've created the DAX expression, select the checkmark above the expression box to validate the expression.
8. Select Save.

Step 3: Assign Users to the role.

You can't assign users to a role within Power BI Desktop. You assign them in the Power BI service. After you've created your roles, test the results of the roles within Power BI Desktop.

Step 4: Publish the report.

Now that you're done validating the roles in Power BI Desktop, go ahead and publish your report to the Power BI service.

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

QUESTION 77**DRAG DROP**

You create a data model in Power BI.

Report developers and users provide feedback that the data model is too complex. The model contains the following tables.

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
	region_id	Integer
Manager	manager_id	Integer
	name	Varchar

The model has the following relationships:

There is a one-to-one relationship between Sales_Region and Region_Manager. There are more records in Manager than in Region_Manager, but every record in Region_Manager has a corresponding record in Manager.

There are more records in Sales_Manager than in Sales_Region, but every record in Sales_Region has a corresponding record in Sales_Manager.

You need to denormalize the model into a single table. Only managers who are associated to a sales region must be included in the 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.
NOTE: More than one order of answer choices is correct. You will receive credit for any of the correct orders you select. Select and Place:

Actions

- 1 Merge [Region_Manager] and [Manager] by using an inner join.
- 2 Merge [Sales_Manager] and [Sales_Region] by using a left join.
- 3 Merge [Sales_Region] and [Sales_Manager] by using an inner join.
- 4 Merge [Sales_Region] and [Sales_Manager] by using an inner join as a new query named [Sales_Region_and_Manager].
- 5 Merge [Sales_Region] and [Region_Manager] by using a right join as a new query named [Sales_Region_and_Region_Manager].
- 6 Merge [Sales_Region] and [Region_Manager] by using an inner join.

Answer Area

Actions

- Merge [Sales_Manager] and [Sales_Region] by using a left join.
- Merge [Sales_Region] and [Sales_Manager] by using an inner join as a new query named [Sales_Region_and_Manager].
- Merge [Sales_Region] and [Region_Manager] by using an inner join.

Answer Area

Explanation/Reference:

Section:

Step 1: Merge [Sales_Region] and [Sales_Manager] by using an inner join. Inner Join: Returns the rows present in both Left and right table only if there is a match.

Otherwise, it returns zero records.

Note: Sales_Region and Sales_manager

There is a one-to-one relationship between Sales_Region and Region_Manager. There are more records in Sales_Manager than in Sales_Region, but every record in Sales_Region has a corresponding record in Sales_Manager.

Step 2: Merge [Region_Manager] and [Manager] by using inner join. Only managers who are associated to a sales region must be included in the reports.

Note: Region_Manager and Manager.

There are more records in Manager than in Region_Manager, but every record in Region_Manager has a corresponding record in Manager. Step 3: Merge

[Sales_region] and [Region_Manager] by using a right join as new query named [Sales_region_and_Region_Manager] <https://www.tutorialgateway.org/joins-in-power-bi/>

QUESTION 78

DRAG DROP

You have a Microsoft Excel spreadsheet that contains the data shown in the following table.

Department	Stage	School1	School2	School3	School4
Mathematics	1	75	65	90	70
Mathematics	2	80	70	80	75
Geography	1	95	65	80	75
Geography	2	80	70	80	75

You plan to build a data model for a Power BI report.

You need to prepare the data so that it is available to the model in the format shown in the following table.

Department	School	Avg Score
Mathematics	School1	77.5
Geography	School1	87.5

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

Select and Place:

Actions
Select the [Department] and [Stage] columns and unpivot the other columns.
Select and unpivot the [Department] and [Stage] columns.
Group by [Department] and [School] and create a new column named [Avg Score] that uses the AVERAGE function on the [Score] column.
Rename the [Attribute] column as [School] and the [Value] column as [Score].
Group by [Department][School1][School2][School3][School4] and create a new column named [Avg Score] that uses the AVERAGE function on the [Stage] column.

Answer Area



Actions

Select and unpivot the [Department] and [Stage] columns.

Group by [Department], [School1], [School2], [School3], [School4] and create a new column named [Avg Score] that uses the average function on the [Score] column.

Answer Area

Select the [Department] and [Stage] columns and unpivot the other columns.

Rename the [Attribute] column as [School] and the [Value] column as [Score].

Group by [Department] and [School] and create a new column named [Avg Score] that uses the average function on the [Score] column.

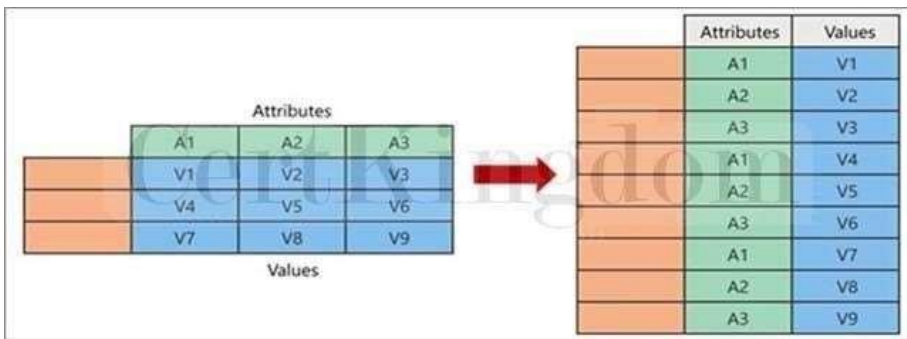
Correct Answer: A

Explanation

Explanation/Reference:

Section:

Step 1: Select the [Department] and [Stage] columns and unpivot the other columns. We unpivot the School1, School2, School3, and the School4 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. Example:



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.

Step 2: Rename the [Attribute] column as [School] and the [Value] column as [Score], Step 3: Group by [Department] and [School] and..

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

QUESTION 79

A user creates a Power BI report named ReportA that uses a custom theme.

You create a dashboard named DashboardA.

You need to ensure that DashboardA uses the custom theme. The solution must minimize development effort. Which two actions should you perform? Each correct answer presents part of the solution. NOTE: Each correct selection is worth one point.

A. **Publish ReportA to Power BI.**

- B. From ReportA save the current theme.
- C. Publish ReportA to the Microsoft Power BI Community theme gallery.**
- D. From DashboardA, create a custom theme.
- E. From DashboardA, upload a JSON theme.**

QUESTION 80

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

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

Correct Answer: C

Explanation

Explanation/Reference:

Section:

Line charts can have many different lines, for example both revenue and cost over time.

<https://docs.microsoft.com/en-us/power-bi/visuals/power-bi-line-chart>

QUESTION 81

You are using the key influencers visual to identify which factors affect the quantity of items sold in an order. You add the following fields to the Explain By field:

Customer Country
Product Category
Supplier Country
Sales Employee
Supplier Name
Product Name
Customer City

The key influencers visual returns the results shown in the following exhibit.



What can you identify from the visual?

- A. Customers in Austria order 18.8 more units than the average order quantity.
- B. Customers in Boise order 20.37 percent more than the average order quantity.
- C. Product Category positively influences the quantity per order. D. Customers in Cork order lower quantities than average.

Correct Answer: A

Explanation

Explanation/Reference:

Section:

Average quantity of units is displayed.

Incorrect:

Not B: Average quantity of units is displayed, not percentage. <https://docs.microsoft.com/en-us/power-bi/visuals/power-bi-visualization-influencers>

QUESTION 82

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

Correct Answer: B

Explanation

Explanation/Reference:

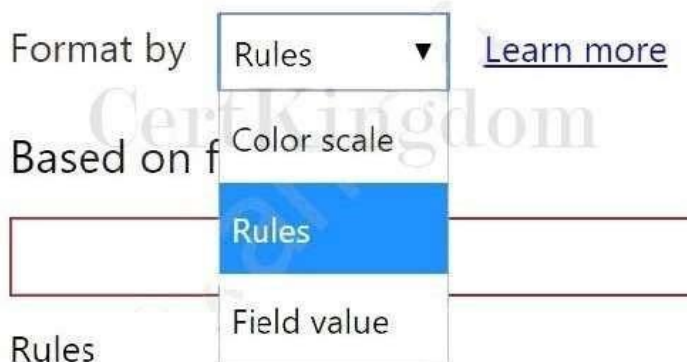
Section:

Finding the conditional formatting in the card visual is a bit tricky. There is no separate option for that. You need to go to the Format tab of the visual, and then expand the Data Label. The right beside the Data Label's colour you need to hover your mouse, and you will find a three dots icon appearing, which if you click on it, you will see Conditional Formatting.



Now in the Conditional Formatting tab, you can apply it in different methods. for example, you can choose

Color



Rules, and then



The Rules mode will give you the ability to put custom roles as below;

[https://radacad.com/enhance-the-card-visual-in-power-bi-with-conditional-](https://radacad.com/enhance-the-card-visual-in-power-bi-with-conditional-formatting)

formatting

QUESTION 83

DRAG DROP

You have a Power BI dashboard named DashboardA that contains a tile named TileA. TileA contains a treemap visual from a report named ReportA.

You need to provide the users of DashboardA with additional tiles that relate to the contents of TileA.

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. Select and Place:



QUESTION 84

You are creating a dashboard by using the Power BI service. You have an existing report page that contains three charts. You need to add the charts to the dashboard while maintaining the interactivity between the charts. What should you do?

- A. Edit interactions in the report and set all interactions to Filter.
- B. Pin each chart as a tile.
- C. Edit the dashboard theme and pin each chart as a tile.
- D. Pin the report page as a live tile.

Correct Answer: D

Explanation

Explanation/Reference:

Section:

One way to add a new dashboard tile is by pinning an entire report page. This is an easy way to pin more than one visualization at a time. Also, when you pin an entire page, the tiles are live; you can interact with them right there on the dashboard. And changes you make to any of the visualizations back in the report editor, like adding a filter or changing the fields used in the chart, are reflected in the dashboard tile as well. Pinning live tiles from reports to dashboards is only available in Power BI service (app.powerbi.com). <https://docs.microsoft.com/en-us/power-bi/create-reports/service-dashboard-pin-live-tile-fromreport>

QUESTION 85

You are building a Power BI report.

Users will view the report by using their mobile device.

You need to configure the report to display data based on each user's location. Which two actions should you perform? Each correct answer presents part of the solution.

NOTE: Each correct selection is worth one point.

- A. From Power Query Editor, detect the data types of the relevant columns.
- B. **In Data Category, set the geographic data category for the relevant columns.**
- C. Create a hierarchy for columns of the geography data type.
- D. **Use the columns of the geography data type in all visuals.**
- E. For the relevant columns, set synonyms to match common geographical terms.

Correct Answer: BD

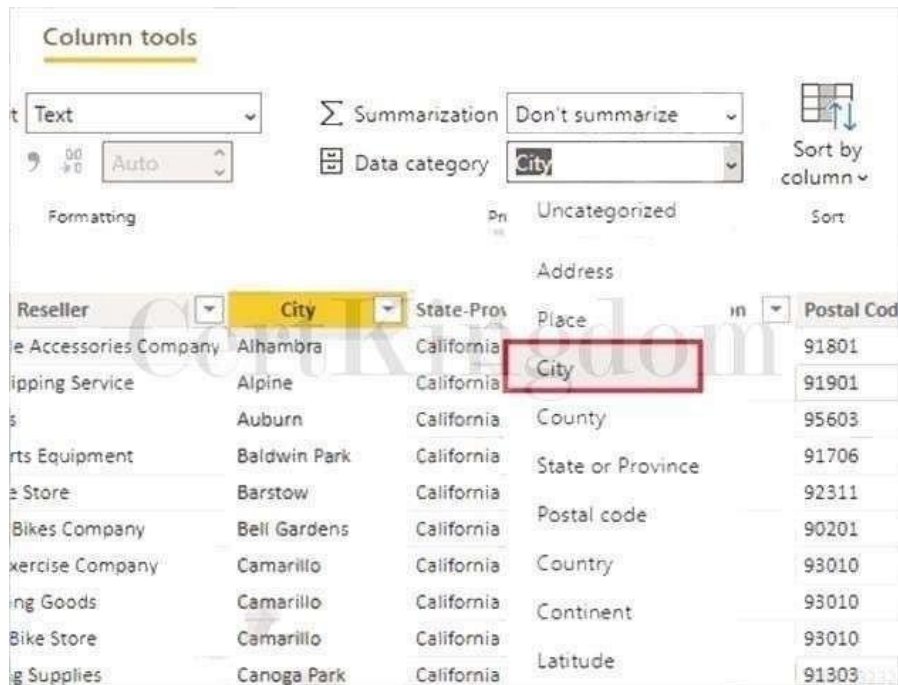
Explanation

Explanation/Reference:

Section:

B: Identify geographic data in your report

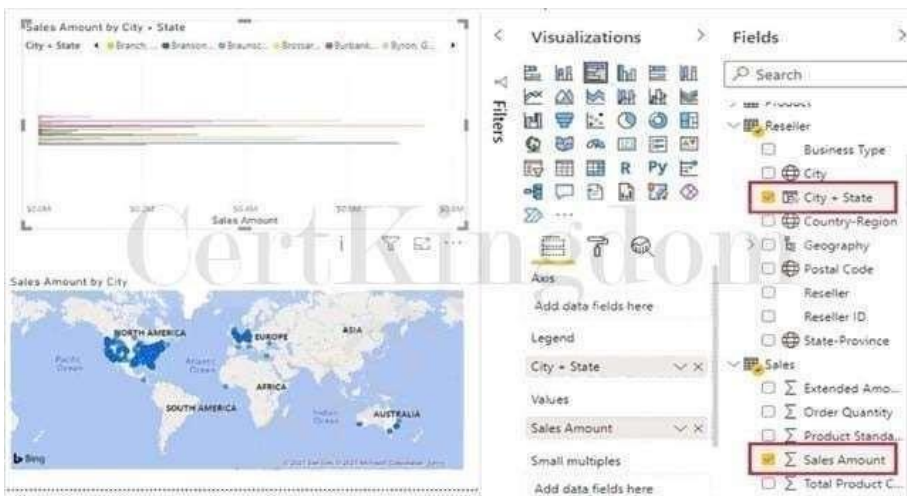
1. In Power BI Desktop, switch to Data View Data View icon.
2. Select a column with geographic data ? for example, a City column.
3. On the Modeling tab, select Data Category, then the correct category----- in this example, City.



4. Continue setting geographic data categories for any other fields in the model.

D: Create visuals with your geographic data

Switch to Report view Report View icon, and create visuals that use the geographic fields in your data.



In this example, the model also contains a calculated column that brings city and state together in one column.



Publish the report to the Power BI service.

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

QUESTION 86

You have a report that contains a donut chart and a clustered column chart. Interactions between the visuals use the default settings.

You need to modify the report so that when you select a column in the column chart, the donut chart redraws by using the data from the selected column. What should you do?

- A. Select the donut chart and set the column chart interaction to Filter.
- B. **Select the column chart and set the donut chart interaction to Filter.**
- C. Select the donut chart and set the column chart interaction to None.
- D. Select the column chart and set the donut chart interaction to None.

Correct Answer: B

Explanation

Explanation/Reference:

Section:

Filters remove all but the data you want to focus on.

Note: Enable the visual interaction controls.

1. Select a visualization to make it active.
2. Display the Visual Interactions options.
3. In Power BI Desktop, select Format > Edit interactions.



4. To display the visualization interaction controls, select Edit interactions. Power BI adds filter and highlight icons to all of the other visualizations on the report page. We can see that the tree map is cross-filtering the line chart and the map, and is cross-highlighting the column chart. You can now change how the selected visualization interacts with the other visualizations on the report page.



<https://docs.microsoft.com/en-us/power-bi/create-reports/service-reports-visual-interactions>

QUESTION 87

You are creating a Power BI report by using Power BI Desktop. You need to include a visual that shows trends and other useful information automatically. The visual must update based on selections in other visuals. Which type of visual should you use?

- A. Q&A
- B. **smart narrative**
- C. key influencers
- D. **decomposition tree**

Correct Answer: B

Explanation

Explanation/Reference:

Section:

The ONLI narrative visualization helps you quickly summarize visuals and reports. It provides relevant innovative insights that you can customize.

Use smart narrative summaries in your reports to address key takeaways, to point out trends, and to edit the language and format for a specific audience. In PowerPoint, instead of pasting a screenshot of your report's key takeaways, you can add narratives that are updated with every refresh. Your audience can use the summaries to understand the data, get to key points faster, and explain the data to others. <https://docs.microsoft.com/en-us/power-bi/visuals/power-bi-visualization-smart-narrative>

QUESTION 88

In Power BI Desktop, you have a dataset that contains a table. You create a table visual on a Power BI report page as shown in the following exhibit.

Plant Name	Plant Image
Pothos	https://raw.githubusercontent.com/ml
Spider plant	https://raw.githubusercontent.com/ml
philodendron	https://raw.githubusercontent.com/ml
ZZ plant	https://raw.githubusercontent.com/ml

You need to configure the visual to display the referenced image instead of the URL in the Plant Image column. What should you do?

- A. From the Formatting tab, select Values, and then set URL icons to On for the table.
- B. Set the Data category of the Plant Image field to Web URL.
- C. Set the Data type of the Plant Image field to Binary.
- D. Set the Data category of the Plant Image field to Image URL.**

Correct Answer: D

Explanation

Explanation/Reference:

Section:

Add images to your report

1. Create a column with the URLs of the images. See Considerations later in this article for requirements.
2. Select that column. On the Column tools ribbon, for Data category, select Image URL.
3. Add the column to a table, matrix, slicer, or multi-row card. Step 3: From powerbi.com, add a tile for Excel1 dataset to DashboardA. In the Power BI service (app.powerbi.com), a dashboard contains tiles pinned from one or more datasets, so you can ask questions about any of the data contained in any of those datasets. <https://docs.microsoft.com/en-us/power-bi/create-reports/power-bi-images-tables> <https://docs.microsoft.com/en-us/power-bi/create-reports/power-bi-tutorial-q-and-a>

QUESTION 89

DRAG DROP

You have a Microsoft Excel spreadsheet named Excel1 that contains survey results. You have a Power BI dashboard named DashboardA that has Q&A enabled.

You need to ensure that users who can access DashboardA can ask questions based on the contents of Excel1 and pin visuals based on their queries to DashboardA.

The solution must minimize development time.

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. Select and Place:

Actions

- From powerbi.com, pin a range from Excel1 to DashboardA.
- From Excel, format the data in Excel1 as a table.
- From powerbi.com, import Excel1 as a dataset.
- From powerbi.com, add a tile for the Excel1 dataset to DashboardA.
- From powerbi.com, upload Excel1.
- From Excel, create a named range by using the data in Excel1.

Answer Area

- From powerbi.com, upload Excel1.
- From powerbi.com, import Excel1 as a dataset.
- From powerbi.com, add a tile for the Excel1 dataset to DashboardA.

Explanation/Reference:

Section:

Step 1: From powerbi.com, upload Excel1.

Upload your Excel file to the Power BI service.

The Power BI service connects to many data sources, including Excel files that live on your computer.

1. Sign in to the Power BI service.
2. In My workspace, select New > Upload a file.
3. Select Local File, browse to where you saved the Financial Sample Excel file, and select Open.
4. On the Local File page, select Import.

Now you have a Financial Sample dataset. Power BI also automatically created a blank dashboard. If you don't see the dashboard, refresh your browser.

Step 2: From powerbi.com, import Excel1 as a dataset.

Step 3: From powerbi.com, add a tile for the Excel1 dataset to DashboardA.

<https://docs.microsoft.com/en-us/power-bi/create-reports/service-from-excel-to-stunning-report>

QUESTION 90

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 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 a 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**

Correct Answer: B

Explanation

Explanation/Reference:

Section:

Instead: You create a percentile line by using the Salary measure and set the percentile to 50%. The median is the middle value or the 50th percentile of a data set. https://dash-intel.com/powerbi/statistical_functions_median.php

QUESTION 91

You have a Microsoft Excel file on a file server.

You create a Power BI report and import a table from the Excel file.

You publish the report.

You need to ensure that the data refreshes every four hours. What should you do first?

A. Upload the Excel file to a Power BI workspace.

B. Create a subscription to the report.

C. **Deploy an on-premises data gateway.**

D. Edit the data source credentials.

Correct Answer: C

Explanation

Explanation/Reference:

Section:

You can schedule refresh for the On-premises data gateway (personal mode) and the On-premises data gateway. You specify refresh options in the following areas of the Power BI service: Gateway connection, Data source credentials, and Scheduled refresh. <https://docs.microsoft.com/en-us/power-bi/connect-data/refresh-scheduled-refresh>

QUESTION 92

You have a dataset that is used infrequently and refreshes every hour. You receive a notification that the refresh was disabled due to inactivity. Which two actions will cause the scheduled refresh schedule to resume? Each correct answer presents a complete solution.

NOTE: Each correct selection is worth one point.

A. Enable query caching for the dataset.

- B. Import the dataset to Microsoft Excel.
- C. From the Power BI service, open a dashboard that uses the dataset.**
- D. From the Power BI service, open a report that uses the dataset.**
- E. From PowerShell, run the get-powerbireport cmdlet.

Correct Answer: CD

Explanation

Explanation/Reference:

Section:

After two months of inactivity, scheduled refresh on your dataset is paused. A dataset is considered inactive when no user has visited any dashboard or report built on the dataset. At that time, the dataset owner is sent an email indicating the scheduled refresh is paused. The refresh schedule for the dataset is then displayed as disabled. To resume scheduled refresh, simply revisit any dashboard or report built on the dataset.

Incorrect:

Not E: get-powerbireport retrieves a list of Power BI reports that match the specified search criteria and scope.

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

QUESTION 93

You have a Power BI workspace that contains a dataset, a report, and a dashboard. The following groups have access:

External users can access the dashboard.

Managers can access the dashboard and a manager-specific report. Employees can access the dashboard and a row-level security (RLS) constrained report. You need all users, including the external users, to be able to tag workspace administrators if they identify an issue with the dashboard. The solution must ensure that other users see the issues that were raised.

What should you use?

A. comments

- B. chat in Microsoft Teams
- C. alerts
- D. subscriptions

Correct Answer: A

Explanation

Explanation/Reference:

Section:

Add a personal comment or start a conversation about a dashboard or report with your colleagues. The comment feature is just one of the ways a business user can collaborate with others. Note: Comments can be added to an entire dashboard, to individual visuals on a

dashboard, to a report page, to a paginated report, and to individual visuals on a report page.

Add a general comment or add a comment targeted at specific colleagues.

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

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