MODEL QUESTIONS & ANSWERS

FULL EXPLAINED

for the Microsoft Data Analyst Exam
PL-300 By Setscods

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How to enjoy this e-book

1. To enjoy the full functionalities of this e-book please open it from your laptop or desktop.
2. From the Question Section, use the interactive inputs to select your answers.
3. Click on the circle Page Transfer button to take you to the Answer & Explanation Section that corresponded to the question.
4. Compare your answers and read the explanation.
5. From the Answers & Explanation Section click again the button to go back to the question related.

Interactive elements

Check Box	Radio Button	Number Box	Combo Box	Page Transfer
☒	◉	1		

QUESTIONS SECTION

QUESTIONS SECTION

Question 1

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

Answer area

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

Question 2

You are creating a Microsoft Power BI model that has two tables named CityData and Sales. CityData contains only the data shown in the following table. Sales contains only the data shown in the following table. For each of the following statements, select Yes if the statement is true. Otherwise, select No. NOTE: Each correct selection is worth one point.

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

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

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Answer area

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

Question 3

You create the following step by using Power Query Editor. =

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

A row has a value of 21318 Lasalle Street in the AddressLine1 column. What Will the value be when the step is applied?

Answer area

- [ ] A. 1318
- [ ] B. 1319
- [ ] C. 21318 Lasalle Street
- [ ] D. 21319 Lasalle Street

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Question 4

You have a report that contains four pages. Each page contains slicer for the same four fields. Users report that when they select values on a slicer on one page, the visuals are not update 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 wroth one point.

Answer area

- ☐ 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.

Question 5

You have a data model that contains many complex DAX expressions. The expressions contain frequent references to the RELATED and RELATEDTABLE functions. You need to recommend a solution to minimize the use of the RELATED and RELATEDTABLE functions.

What should you recommend?

Answer area

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

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Question 6

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

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

Answer area

Cardinality: _____ Cross-filter direction: _____

Question 7

You are modeling data by using Microsoft Power Bl. 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.

Answer area

Does this meet the goal?

- A. Yes
- B. No

Question 8

You are configuring a Microsoft Power Bl data model to enable users to ask natural language questions by using Q&A. You have a table named Customer that has the following measure. Customer Count = DISTINCTCOUNT (Customer[CustomerID]) Users frequently refer to customers as subscribers. You need to ensure that the users can get a useful result for "subscriber count" by using Q&A. The solution must minimize the size of the model. What should you do?

Answer area

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

Question 9

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

NOTE: Each correct selection is worth one point.

Answer area

Base value: Date: Period:

Question 10

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, select the appropriate roles for each users. Each role may be used once, more than once, or not at all.NOTE: Each correct selection is worth one point.

Answer area

User1: User2:

Question 11

You import a large dataset to Power Query Editor. You need to identify whether a column contains only unique values. Which two Data Preview options can you use? Each correct answer presents a complete solution.

NOTE: Each correct selection is worth one point

Answer area

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

Question 12

You receive revenue data that must be included in Microsoft Power Bl reports. You perform an initial load of the data from a Microsoft Excel source as shown in the following exhibit. 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. Add the numbers inside the boxes (1 indicates first step).

column1	column2	column3	column4	column5	column6
Department	Product	2016	2017	2018	2019
Bikes	Carbon Mountain	1002815	1006617	1007814	1007239

Answer area

Actions

- [ ] A. Show whitespace
- [ ] B. Select Use Headers as First Row.
- [ ] C. Select Department and Product and Unpivot Other Columns
- [ ] D. Select Use First Rows as Headers
- [ ] E. Rename the third column as Year and the fourth columns as Revenue.
- [ ] F. Select Department; and Product and Upivot Columns.
- [ ] G. Rename the third column as Revenue and the fourth column as Year.

Question 13

You build a report to help the sales team understand its performance and the drivers of sales. The team needs to have a single visualization to identify which factors affect success. Which type of visualization should you use?

Answer area

- [ ] A. Key influences
- [ ] B. Funnel chart
- [ ] C. Q&A
- [ ] D. Line and clustered column chart
- [ ] E. Column quality
- [ ] F. Monospaced

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Question 14

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.

Employee	Total Before Tax	Order Count
Amy Trefl	$17,329,344	7,276
Anthony Grosse	$17,300,382	7,257
Archer Lamble	$18,551,147	7,532
Hudson Hollinworth	$17,716,354	7,400
Hudson Onslow	$17,815,605	7,281
Jack Potter	$17,621,145	7,387
Kayla Woodcock	$18,107,095	7,474
Lily Code	$17,612,640	7,268
Sophia Hinton	$17,768,199	7,349
Taj Shand	$17,812,365	7,371
Total	**$177,634,276**	**73,595**

Answer area

Selecting a quarter on the line chart will

[ ]

Selecting a data Paint on the Tailspin Toys line on the line chart Will

[ ] the map.

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Question 15

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

student	classes
Mike A	Math,English,Art
Sam B	Physics
Kathy S	English,Math

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

student	Value
Mike A	Math
Mike A	English
Mike A	Art
Sam B	Physics
Kathy S	English
Kathy S	Math

Which 2 steps should you use in the query?

Answer area

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

Question 16

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

The report uses an imported dataset that contains one fact table. The fact table contains 12 million rows. The dataset is scheduled to refresh twice a day at 08:00 and 17:00. The report is a single page that contains 15 AppSource visuals and 10 default visuals.

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

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

What should you recommend?

Answer area

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

Question 17

Your company plans to separate development and production assets such as datasets, reports, and dashboards in Microsoft Power BI. You need to recommend an application lifecycle strategy. The solution must minimize access to production assets and prevent end users from viewing the development assets.

What should you recommend?

Answer area

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

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Question 18

You create a parameter named DataSourceExcel that holds the file name and location of a Microsoft Excel data source. You need to update the query to reference the parameter instead of multiple hard-coded copies of the location within each query definition.

Solution: You create a new query that references DataSourceExcel.

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

Does this meet the goal?

Answer area

- ☐ A. Yes
- ☐ B. No

Question 19

You have a folder of monthly transaction extracts. You plan to create a report to analyze the transaction data. You receive the following email message:

"Hi. I've put 24 files of monthly transaction data onto the shared drive. File Transactions201901.csv through Transactions201912.csv have the latest set of columns, but files Transactions201801.csv to Transactions201812.csv have an older layout without the extra fields needed for analysis. Each file contains 10 to 50 transactions." You get data from the folder and select Combine & Load.

ID	Date	CustomerID	Amount
1	01/01/2018	5	28.99
2	01/01/2018	10	31.88
3	01/01/2018	15	22.99
4	01/01/2018	25	14.25
5	01/01/2018	35	85
6	01/01/2018	45	47.74
7	01/01/2018	55	76.66
8	01/01/2018	51	99.99
9	01/01/2018	52	10.99
10	01/01/2018	58	85

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

Answer area

Statements	Yes	No
The resulting query will contain all the columns from the 2018 transactions.	●	○
The resulting query will contain all the columns from the 2019 transactions.	●	○
Setting Data Type Detection **to Based on first 200 rows** will improve import times.	○	●

Question 20

You have five sales regions. Each region is assigned a single salesperson. You have an imported dataset that has a dynamic row-level security (RLS) role named Sales. The Sales role filters sales transaction data by salesperson. Salespeople must see only the data from their region. You publish the dataset to powerbi.com, set RLS role membership, and distribute the dataset and related reports to the salespeople. A salesperson reports that she believes she should see more data. You need to verify what data the salesperson currently sees. What should you do?

Answer area

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

Question 21

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

State (Sales)	Type	Sales
Sales	Sales_id	Integer
	Sales_data	Datetime
	Customer_id	Integer
	Sales_amount	Floating
	Employee_id	Integer
	Sales_ship_date	Datetime
Employee	Store_id	Varchar (100)
	Employee_id	Integer
	fast_name	Varchar (100)
	Last_name	Varchar (100)
	Employee_photo	Binary

Answer area

Employee_id: [ ] Employee_photo: [ ]

Question 22

You have a Microsoft Power Bl 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?

Answer area

- ☐ 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 23

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 Bl Desktop?

Answer area

- ☐ 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.

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Question 24

You have the visual shown in the Original exhibit

You need to configure the visual as shown in the Modified exhibit:

What should you add to the visual?

Answer area

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

Question 25

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

Which type of visualization should you use?

Answer area

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

Question 26

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

Answer area

Typpe of calculation: _____

Formula: _____

Question 27

You are creating a column chart visualization. You configure groups as shown in the Groups exhibit.

The visualization appears as shown in the Chart exhibit. For each of the following statements, select Yes if the statement is true. Otherwise, select No.

Answer area

Statements	Yes	No
The data segment into 5 groups.	○	○
The data was Split 5 deciles.	○	○
To increase the bin size, you must decrease the bin count.	○	○

Question 28

You are modeling data in table named SalesDetail by using Microsoft Power Bl. You need to provide end users with access to the summary statistics about the SalesDetail data. The users require insights on the completeness of the data and the value distributions. Which three actions should you perform in sequence? To answer, enumerate the actions in the correct order. (1 indicates first step).

Answer area

Actions

- ☐ A. Create a query that users Common Data Service as data source
- ☐ B. Create a blank query a data source
- ☐ C. Specify the followign query. = Table.Distinct(#'SaleDetail')
- ☐ D. Select Use First Rows as Headers
- ☐ E. Create a parameter that users a query for the suggested values.
- ☐ F. Specify the following query. = Table.Profile(#'SalesDetail')
- ☐ G. Create a visual for the query table.

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Question 29

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?

Answer area

- ☐ A. Yes
- ☐ B. No

Question 30

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

Answer area

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

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Question 31

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

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

Which relationship should you use to link the tables?

Answer area

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

Question 32

You have a large dataset that contains more than 1 million rows. The table has a datetime column named Date. You need to reduce the size of the data model. What should you do?

Answer area

- [ ] A. Round the hour of the Date column to startOfHour.
- [ ] B. Change the data type of the Date column to Text.
- [ ] C. Trim the Date column.
- [ ] D. Split the Date column into two columns, one that contains only the time and another that contains only the date.

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Question 33

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?

Answer area

- [ ] 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 34

You have the tables shown in the following table. 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.

Table name	Column name
Campaings	Campaing_ID
	Name
Ads	Ad_id
	Name
	Campaign_id
Impressions	Impression_id
	Ad_id
	Site_name
	Impression_time
	Impression_date

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Answer area

- [ ] 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 35

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?

Answer area

- [ ] A. Yes
- [ ] B. No

Question 36

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

Answer area

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

Question 37

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

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

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Answer area

- [ ] A. Add a measure to the visual that uses the following DAX expression. Measure1 = PERCENTILEX.INC (Sales,Sales[Total Sales],0.40)
- [ ] B. Add a new percentile line that uses Total Sales as the measure and 40% as the percentile.
- [ ] C. Create a horizontal line that has a fixed value of 24,000.
- [ ] D. Add a measure to the visual that uses the following DAX expression. Measure1 = PERCENTILEX.EXC (Sales,Sales[Total Sales],0.40)

Question 38

You have the following three versions of an Azure SQLdatabase:

Test

Production

Development

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

Which should you do?

Answer area

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

Question 39

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

First name

Last name

Email address

State/Region

Phone number

You import the list into Power Query Editor. You need to ensure that the list contains records for each State/Region to which you want to target a marketing campaign. Which two actions should you perform? Each correct answer presents part of the solution. NOTE: Each correct selection is worth one point.

Answer area

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

Question 40

You open a query in Power Query Editor. You need to identify the percentage of empty values in each column as quickly as possible.

Which Data Preview option should you select?

Answer area

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

Question 41

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?

Answer area

- ☐ A. no impact
- ☐ B. highlight
- ☐ C. filter

Question 42

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

client_notified_timestamp
client_notified_source
client_notified_sourceid
client_notified_value
client_responded_timestamp
client_responded_source
client_responded_sourceid

client_responded_value

You plan to include only a subset of the returned columns. You need to remove any columns that have a suffix of sourceid. How should you complete the Power Query M code? To answer, select the appropriate options in the answer area.

Answer area

```
let
    Source = ..,
    rawData = Source{[tableId="clientData"]}[Data],
    removeSources = [                    ] (rawData,
        [                ] (Table.ColumnNames(rawDara),
    each [              ] (_, "sourceid"))),
in
    removeSources
```

Question 43

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?

Answer area

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

Question 44

You have a CSV file that contains user complaints. The file contains a column named Logged. Logged contains the date and time each compliant occurred. The data in Logged is in the following format: 2018-12-31 at 08:59. You need to be able to analyze the complaints by the logged date and use a built-in date hierarchy.

What 2 actions should you do?

Answer area

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

Question 45

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

Customer ID	Email Address
Phone	Address ID

Address contains the following columns:

Address ID	City
Address Line 1	State/Region
Address Line 2	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?

Answer area

- 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.

Question 46

You have an Azure SQL database that contains sales transactions. The database is updated frequently. You need to generate reports from the data to detect fraudulent transactions. The data must be visible within five minutes of an update.

How should you configure the data connection?

Answer area

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

Question 47

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

Unit Price

Quantity Ordered

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

Which type of visualization and which feature should you use? To answer, select the appropriate options in the answer area. NOTE: Each correct selection is worth one point.

How should you configure the data connection?

Answer area

Visualization:

Feature:

Question 48

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?

Answer area

- [ ] 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.

Question 49

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

You need to modify the dashboard to appear as shown in the Modified Dashboard exhibit.

What should you do?

Answer area

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

Question 50

You have a line chart that shows the number of employees in a department over time. You need to see the total salary costs of the employees when you hover over a data point. What are two possible ways to achieve this goal? Each correct answer presents a complete solution.

NOTE: Each correct selection is worth one point.

Answer area

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

Question 51

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?

Answer area

- [ ] A. Yes
- [ ] B. No

Question 52

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.

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Answer area

- [ ] A. Pin items from the reports to the dashboard.
- [ ] B. Rearrange, resize, or remove items from the pone view.
- [ ] C. Change the dashboard view to Phone view.
- [ ] D. Open the dashboard
- [ ] E. Create a pone layout for the existing reports.

Question 53

You view a query named Transactions as shown in the following exhibit. The query gets CSV files from a folder.

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

Answer area

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

There are [ ] CSV files:

Question 54

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?

Answer area

- [ ] 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.

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Question 55

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

In powerbi.com, when users load the visual, they only see some of the customers.

What is the cause of the issue?

Answer area

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

Question 56

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

MonthName	Total Sales	Sales Last Year	% Growth to Last Year
January	£559,263.79	£144,365.51	74.19%
February	£583,915.29	£215,923.28	63.02%
March	£684,091.92	£211,347.46	69.11%
April	£957,686.49	£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%

Answer area

Conditional formatting: [ ] Format by: [ ]

Question 57

You have a query named Customer that imports CSV files from a data lake. The query contains 500 rows as shown in the exhibit. Each file contains deltas of any new or modified rows from each load to the data lake. Multiple files can have the same customer ID. You need to keep only the last modified row for each customer ID. Which three actions should you perform? To answer, select the appropriate actions from the list of actions. Assume that it should be in a correct order.

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

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Answer area

- [ ] A. Filter the Customer query on Modified Dates is Latest.
- [ ] B. Merge the CustomerGroupe query into the Customer query based on Customer ID and Modified Date by using a left outer join.
- [ ] C. Remove duplicates in the Customer ID column.
- [ ] D. Duplicate the Customer query the Customer query and name the new query CustomerGrouped.
- [ ] E. Group the CustomerGrouped query by Customer ID and output the max Modified Date value into a column named Modified Date.
- [ ] F. Merge the two based on Customer ID and Modified Date using and inner join.

Question 58

You have the line chart shown in the exhibit. You need to modify the chart to meet the following requirements:

Identify months that have order counts above the mean.

Display the mean monthly order count.

Which three actions should you perform? To answer, select the appropriate actions from the list. Assume that it should be in a correct order.

Answer area

- [ ] A. Create a 12 month Rolling average quick measure and add the measure to the line chart value.
- [ ] B. From the Analytics pane, add a Median line.
- [ ] C. Select the line chart.
- [ ] D. From the Analytics pane, add an Average line.
- [ ] E. Turn on data labels for the new line

Question 59

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

What should you use?

Answer area

- [ ] A. Comments
- [ ] B. Tiles
- [ ] C. Microsoft Information Protection sensitivity labels
- [ ] D. Active Directory groups

Question 60

You need to create a DAX measure in the data model that only allows users to see projections at the appropriate levels of granularity. How should you complete the measure? To answer, select the appropriate values form the list. Each value may be used once, more than once, or not at all. NOTE: Each correct selection is worth one point.

Answer area

Total Projected Revenue = [ ] **(**

NOT([ ] ('Date'[Date])),

[ ] (Projection [Revenue Projection]))

Question 61

Your company has affiliates who help the company acquire customers. You build a report for the affiliate managers at the company to assist them in understanding affiliate performance. The managers request a visual showing the total sales value of the latest 50 transactions for each affiliate. You have a data model that contains the following tables. You need to develop a measure to support the visual.

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

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

Answer area

Revenue Last 50 Transactions = ([ ]

[ ] (Transactions [Amount]),

[ ] (50, Transactions, Transactions [ ] DESC)

ANSWERS & EXPLANATIONS SECTION

ANSWERS & EXPLANATIONS

Question 1

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

Answer area

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

Answer: C

Solution:

"data concerns" refers to data preview. To check the data preview, go to: Power Query Editor> View > Data Preview. In this section you have:

1. **Column distribution:** shows unique and distinct values.
2. **Column quality:** shows the **%** of: valid, error and empty values.
3. **Column profile:** includes column distribution **(not in %)** and column quality. Shows statistics values and distribution of the column as well.

As data profile is the most complete for addressing concerns, then C is the answer.

Question 2

You are creating a Microsoft Power BI model that has two tables named CityData and Sales. CityData contains only the data shown in the following table. Sales contains only the data shown in the following table. For each of the following statements, select Yes if the statement is true. Otherwise, select No. NOTE: Each correct selection is worth one point.

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

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

Answer area

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

Answer: No No No

Solution:

- Statement 1: No, because CityData and Sales have a many to many cardinality/relation. The RELATED function cannot be used to fetch a column across a **limited** relationship.
- What is a limited relationship? A model relationship is **limited** when there's no guaranteed "one" side, meaning that the relationship uses a Many-to-many cardinality type.
- Statement 2: No, because the DAX expression have an ALL() function, this will always calculate the sum using all the values sales. See Fig.1.
- Statement 3: No, TX is not a value from the column State (CityData) at the CityData table. See Fig.2.

State Sales	Sales total
CA	790
TX	790
WA	790
Total	**790**

Figure 1

State	Sales
CA	140
WA	250
Total	**790**

Figure 2

Question 3

You create the following step by using Power Query Editor. =

Table.ReplaceValue(SalesLT_Address,“1318”,”1319”,Replacer.ReplaceText,{“AddressLine1”})

A row has a value of 21318 Lasalle Street in the AddressLine1 column. What Will the value be when the step is applied?

Answer area

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

Answer: D

Solution:

Only the value defined as *old text* (1318) in the M statement, will be replaced by the *new text* (1319), the rest of the text will remain the same. To replicate the question on Power Query, write the M script from the image below on the Power Query Editor.

Question 4

You have a report that contains four pages. Each page contains slicer for the same four fields. Users report that when they select values on a slicer on one page, the visuals are not update 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 wroth one point.

Answer area

- ☐ 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: A E

Solution:

The question refers to a report shared in Power BI Service. However, the filter's setup could be done from Power BI Desktop as well

Op1: By synchronizing the filter, you can manage where you want the filter to be displayed and which pages you want to filter. For this click on the slicer go to View, Sync slicer and follow the configuration shown in. See Fig.3.

Op2: This option will only filter one page, not the 4 pages.

Op3: This option also solve the problem by creating bookmarks for each selection. Nevertheless, it is not the best option, as it changes totally the filtering experience.

Op4: This option works, as you can set a report level filter. From here users can filter from the filter pane in Power Bi Service. See Fig.4.

Figure 3

Figure 4

Question 5

You have a data model that contains many complex DAX expressions. The expressions contain frequent references to the RELATED and RELATEDTABLE functions. You need to recommend a solution to minimize the use of the RELATED and RELATEDTABLE functions.

What should you recommend?

Answer area

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

Answer: C

Solution:

Instead of using RELATED functions, is better to transform your data before moving to Power BI Desktop. With Power Query, you can merge tables, this will do the exact thing as the RELATED function. Follow the steps below:

- Power Query>Home>Merge Query>
- Once it is merged, click on expand columns:
- By importing the new query, you will minimize your data model and increase the model performance.

Ad_id	Name	Campaign_id
ad_id_001	Discount 10%	campaign_001
ad_id_002	Discount 15%	campaign_002
ad_id_003	Discount 18%	campaign_003

Campaign_id	Name
campaign_001	Mothers Day
campaign_002	Fathers Day
campaign_003	National Day

merge the 2 queries by using a common field: Campaign_id

Ad_id	Name	Campaign_id	Campaigns.Name
ad_id_001	Discount 10%	campaign_001	Mothers Day
ad_id_006	Discount 25%	campaign_001	Mothers Day
ad_id_002	Discount 15%	campaign_002	Fathers Day
ad_id_003	Discount 18%	campaign_003	National Day

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Question 6

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

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

Answer area

Cardinality:

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

Cross-filter direction:

- Single
- Both

Answer: One-to-many, Single

Solution:

Cardinality: One *product* have one *category* → *many to one*. One *category* could have many *products* → *one to many*. Therefore, the specific answer should be *many to one*, but because there is not option available, *one to many* is the best one.

Question 7

You are modeling data by using Microsoft Power Bl. 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 statemen.

Answer area

Does this meet the goal?

- A. Yes
- B. No

Answer: A

Solution:

As you only need a sample, is better to query your data source using a WHERE clause, this will filter only the records related with the dates you are interest on.

Question 8

You are configuring a Microsoft Power Bl data model to enable users to ask natural language questions by using Q&A. You have a table named Customer that has the following measure. Customer Count = DISTINCTCOUNT (Customer[CustomerID]) Users frequently refer to customers as subscribers. You need to ensure that the users can get a useful result for "subscriber count" by using Q&A. The solution must minimize the size of the model. What should you do?

Answer area

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

Answer: A

Solution:

Giving the following table

customerid	customername
id-001	Matt
id-002	Josh
id-003	Joe
id-004	Ross

By using Q&A you may ask how many distinct "**customer**" are there? and the answer will be 4:

If the end users are more familiar with the term **"subscribers"**, instead of customers**,** then it is necessary to add a **synonym**. Go to Power *BI Desktop >Data Model>Home>Q&A Setup>Field synonyms>Customer*:

Question 9

You are creating a quick measure as shown in the following exhibit. You need to create a monthly rolling average measure for Sales over time-How should you configure the quick measure calculation? To answer, select the appropriate options in the answer area. NOTE: Each correct selection is worth one point.

Answer area

Base value:

Month
Total Cost
Total Order Qty
Total Sales
Year

Date:

Date
Month
Total Sales
Year

Period:

Days
Months
Quarters
Year

Answer: Base Value : Total Sales, Date : Date, Period : Months.

Solution:

What is rolling average? For example, a 7-day moving average takes the last 7 days, adds them up, and divides it by 7.

Base value: refers the quantitative field from which the calculation will be based on.

Date: represents the time field that will be used to aggregate the base value.

Period: represents how the Date will aggregate the base value. As the question asks for a monthly average, then it aggregates (the average) the base value by month.

To create quick measure from Power BI go to> *Report View>Home>Quick Measure> Select Rolling Average*.

Question 10

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, select the appropriate roles for each users. Each role may be used once, more than once, or not at all.NOTE: Each correct selection is worth one point.

Answer area

User1:

▼
Admin
Contributor
Member
Viewer

User2:

▼
Admin
Contributor
Member
Viewer

Answer: User1: Member, User2: Contributor

Solution:

User 1: Members can complete all tasks that are associated with admins but can not add or remove users. Cannot delete the workspace. Can not update the metadata about the workspace.

User 2: Contributors can publish reports to the workspace and delete dashboards.

Question 11

You import a large dataset to Power Query Editor. You need to identify whether a column contains only unique values. Which two Data Preview options can you use? Each correct answer presents a complete solution. NOTE: Each correct selection is worth one point

Answer area

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

Answer: B C

Solution:

- Column distribution: shows unique and distinct values.
- Column quality: shows % of valid, error and empty values.
- Column profile: includes column distribution and column quality (not in percentage) plus it shows statistics values and distribution of the column.

*A monospaced font is a font whose letters and characters each occupy the same amount of horizontal space:

accountid
f9fa6e76-ab12-e811-a959-000d3a109495
a9c0764f-3323-e811-a95d-000d3a109d70
4ac653b1-e058-e911-a81d-000d3a18965d
4cc653b1-e058-e911-a81d-000d3a18965d

Not aligned with monospace:

accountid
f9fa6e76-ab12-e811-a959-000...
a9c0764f-3323-e811-a95d-000...
4ac653b1-e058-e911-a81d-000...
4cc653b1-e058-e911-a81d-000...

Question 12

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. 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. Add the numbers inside the boxes (1 indicates first step).

column1	column2	column3	column4	column5	column6
Department	Product	2016	2017	2018	2019
Bikes	Carbon Mountain	1002815	1006617	1007814	1007239

Answer area

Actions

- ☐ A. Show whitespace
- ☐ B. Select Use Headers as First Row.
- ☐ C. Select Department and Product and Unpivot Other Columns
- ☐ D. Select Use First Rows as Headers
- ☐ E. Rename the third column as Year and the fourth columns as Revenue.
- ☐ F. Select Department; and Product and Upivot Columns.
- ☐ G. Rename the third column as Revenue and the fourth column as Year.

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Answer: B F E

Solution:

From Power Query>Transfrom, first you need to promote the headers, as they are shown as values. Second you need to unpivot the 4 last columns, as they contain the year and the revenue data. By unpivoting means that the columns selected will become data values. Be aware that the answer says to unpivot **THE OTHER COLUMS**, meaning that it will unpivot the ones that were not selected. Finally rename the columns that were unpivoted.

Department	Product	Year	Revenue
Bikes	Carbon Mountain	2016	1002815
Bikes	Carbon Mountain	2017	1006617
Bikes	Carbon Mountain	2018	1007814
Bikes	Carbon Mountain	2019	1007239

Question 13

You build a report to help the sales team understand its performance and the drivers of sales. The team needs to have a single visualization to identify which factors affect success. Which type of visualization should you use?

Answer area

- ☐ A. Key influences
- ☐ B. Funnel chart
- ☐ C. Q&A
- ☐ D. Line and clustered column chart
- ☐ E. Column quality
- ☐ F. Monospaced

Answer: A

Solution:

Key influences: The *key influencer* visualization shows the factors that drive a specific metric. It analyzes the data and ranks the factors according to the metric selected and displays them as key influencers.

Funnel chart: A *funnel chart* helps to visualize a linear process that has a sequential connected stages. For example, a sales funnel that tracks customers through stages: Lead > Qualified Lead > Prospect > Contract > Close.

Q&A: is not a visualization.

Line and cluster column chart: In Power BI, a combo chart is a single visualization that combines a line chart and a column chart.

Question 14

You have a report page that contains the visuals shown in the following exhibit. Use the drop-down menus to select the answer choice that completes each statement based on the information presented in the graphic. NOTE: Each correct selection is worth one point.

Answer area

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

- -cross-filter
- -cross-highlight
- -not affect

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

- -cross-filter
- -cross-highlight
- -not affect

Answer: not affect, cross-filter

Solution:

From the exhibit, you can see that the line graph was selected. And from the other graphs you see the type of interaction they have with the selected visual (up left corner symbols):

The bar chart has the interaction switched off, therefore any selection on the line graph will not affect the bar chart.

Map charts only have cross-filtering interaction, for this case the interaction is on.

white>off, grey>on:

Cross-filtering interaction

Cross-highlight interaction

Interaction mode

Question 15

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

student	classes
Mike A	Math,English,Art
Sam B	Physics
Kathy S	English,Math

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

student	Value
Mike A	Math
Mike A	English
Mike A	Art
Sam B	Physics
Kathy S	English
Kathy S	Math

Which 2 steps should you use in the query?

Answer area

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

Answer: C B

Solution:

First you need to split the column class by the coma, then you need to unpivot all the columns that contain course subject.

#"Split Column by Delimiter" = Table.SplitColumn(Source, "classes", Splitter.SplitTextByDelimiter(","), QuoteStyle.None), {"classes.1", "classes.2", "classes.3"}),

#"Unpivoted Other Columns" = Table.UnpivotOtherColumns(#"Split Column by Delimiter", {"student"}, "Attribute", "Value"),

Question 16

You have a Microsoft Power BI report. The size of PBIX file is 550 MB. The report is accessed by using an App workspace in shared capacity of powerbi.com. The report uses an imported dataset that contains one fact table. The fact table contains 12 million rows. The dataset is scheduled to refresh twice a day at 08:00 and 17:00. The report is a single page that contains 15 AppSource visuals and 10 default visuals. Users say that the report is slow to load the visuals when they access and interact with the report. You need to recommend a solution to improve the performance of the report.

What should you recommend?

Answer area

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

Answer: D

Solution:

Opt1: This option will reduce the performance.
Opt2: Custom do not have a high impact in the performance of the visuals.
Opt3: Whit a DirectQuery, depending on the performance of the database, could cause a low performance.
Opt4: This option increases the performance, by deleting unused columns from the model you will also delete columns from the Power Editor. Making the query smaller and easier to read.

Question 17

Your company plans to separate development and production assets such as datasets, reports, and dashboards in Microsoft Power BI. You need to recommend an application lifecycle strategy. The solution must minimize access to production assets and prevent end users from viewing the development assets. What should you recommend?

Answer area

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

Answer: C

Solution:

Production: describes the environment where you distribute the end-product to customer/users.

Development: describes the environment where things are been build or develop.

It is important that end-users are restricted from the development stage, as it can cause confusion leading to not desire updates or deleting assets.

Question 18

You create a parameter named DataSourceExcel that holds the file name and location of a Microsoft Excel data source. You need to update the query to reference the parameter instead of multiple hard-coded copies of the location within each query definition.

Solution: You create a new query that references DataSourceExcel.

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

Does this meet the goal?

Answer area

- ☐ A. Yes
- ☐ B. No

Answer: B

Solution:

The question says "you need to update the query" so creating a new query is not correct.

For example, when working with different environments such as production and development, you want to easily switch between environments. This can be done by using parameters.

Power Editor>View>Always allow (check): Example using Postgres DB.

For a deeply explanation got :
https://www.youtube.com/watch?v=OnaDJkGOmIE

Question 19

You have a folder of monthly transaction extracts. You plan to create a report to analyze the transaction data. You receive the following email message:

"Hi. I've put 24 files of monthly transaction data onto the shared drive. File Transactions201901.csv through Transactions201912.csv have the latest set of columns, but files Transactions201801.csv to Transactions201812.csv have an older layout without the extra fields needed for analysis. Each file contains 10 to 50 transactions." You get data from the folder and select Combine & Load.

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

ID	Date	CustomerID	Amount
1	01/01/2018	5	28.99
2	01/01/2018	10	31.88
3	01/01/2018	15	22.99
4	01/01/2018	25	14.25
5	01/01/2018	35	85
6	01/01/2018	45	47.74
7	01/01/2018	55	76.66
8	01/01/2018	51	99.99
9	01/01/2018	52	10.99
10	01/01/2018	58	85

Answer area

Statements	Yes	No
The resulting query will contain all the columns from the 2018 transactions.	❍	❍
The resulting query will contain all the columns from the 2019 transactions.	❍	❍
Setting Data Type Detection to Based on first 200 rows will improve import times.	❍	❍

Answer: Yes No No

Solution:

Power BI organize the files in alphabetical/numerical order, same as the File Explorer. Meaning that the **First File (check picture)** will be Transaction201801.csv. When you select a file from the ***Sample File*** **(check picture)** drop list, Power BI Editor will apply this schema to all the rest of the files. For the files that do not match with the selected schema there are possible 2 scenarios:

- Data sets that have extra columns in addition to the schema selected: Power BI will reduce the extra columns, leaving only columns that match will the schema.
- Data sets that do not have all the columns as the schema selected: Power BI interprets this as a ***Not Found Error.***

By ticking the ***Skip files with errors box***, Power Editor will skip the files that show error.

First statement: as the First file was selected from the Sample file, the schema will base on the Transaction201801.csv file, meaning that the query will contain all 2018 columns files.

Second statement: as the First file was selected from the Sample file, the schema will be based on Transaction201801.csv file, meaning that the query will not contain all 2019 columns files.

Third statement: this will not solve the columns difference; this option is for the data type not for the schema.

Question 20

You have five sales regions. Each region is assigned a single salesperson. You have an imported dataset that has a dynamic row-level security (RLS) role named Sales. The Sales role filters sales transaction data by salesperson. Salespeople must see only the data from their region. You publish the dataset to powerbi.com, set RLS role membership, and distribute the dataset and related reports to the salespeople. A salesperson reports that she believes she should see more data. You need to verify what data the salesperson currently sees. What should you do?

Answer area

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

Answer: B

Solution:

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.

You can validate that the role you defined is working correctly by testing the role.

To do this, select from Power BI Desktop More Options (...)>Test data as role.

You'll see reports that are available for this role. Dashboards aren't shown in this view. In the page header, the role being applied is shown.

Question 21

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

State (Sales)	Type	Sales
Sales	Sales_id	Integer
	Sales_data	Datetime
	Customer_id	Integer
	Sales_amount	Floating
	Employee_id	Integer
	Sales_ship_date	Datetime
Employee	Store_id	Varchar (100)
	Employee_id	Integer
	fast_name	Varchar (100)
	Last_name	Varchar (100)
	Employee_photo	Binary

Answer area

Employee_id:

▼
Change Type
Delete
Hide
Sort

Employee_photo:

▼
Change Type
Delete
Hide
Sort

Answer: Employee_id: Hide, Employee_photo: Delete

Solution:

Employee_id: As you are not using this column for the analysis, but it is use for creating the relationship between both tables, you can hide it but not delete it.

Employee_photo: As you are not using this table for the analysis, then you can delete it.

Question 22

You have a Microsoft Power Bl 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?

Answer area

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

Answer: A

Solution:

By having too many visuals on one single page, the performance will be affected. It is better to split visuals into multiple pages or reduce the number of visuals. Also, you can apply resources such as drilling- down or Tooltips when users need to access more information.

B and D could reduce the dashboard performance, C option do not really reduce performance.

Question 23

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 Bl Desktop?

Answer area

- ☐ 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

Solution:

My SharePoint site root url is:

https://powerbipanama.sharepoint.com/,

but all of my files are actually in another site that starts with:

https:// powerbipanama.sharepoint.com/sites/externalsales/

In order to get the correct URL, we need to move to the folder where our data is. Then copy the url that your browser shows and paste it in the source path from Power BI.

Reference:

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

Question 24

You have the visual shown in the Original exhibit.

You need to configure the visual as shown in the Modified exhibit:

What should you add to the visual?

Answer area

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

Answer: C

Solution:

Opt A: out of context
Opt B: Fig 6
Opt C: Fig 5
Opt D: Fig 7

Figure 6

Figure 5

Figure 7

Question 25

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

Which type of visualization should you use?

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Answer area

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

Answer: C

Solution:

A line chart is the best option to visualize the growth 2Ŧ l· variable through time.

Question 26

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

Answer area

Type of calculation:	Formula:
▼	▼
A DAX calculated column	Date.EndOfMonth(#date([Year],[Month],1)
A DAX calculated mesure	Date.EndOfQuarter(#date([Year], [Month],1))
An M customn	ENDOFQUARTER(DATE('BalanceSheet'[Year],BalanceSheet[Month],1),0)

Answer: Type of calculation: An M custom column, Formula: Date.EndOfMonth(#date([Year],[Month],1),0)

Solution:

The question refers to data transformation, therefore we should not use DAX, it is recommended to use Power Query and M-language Ŧ2ℕ Řl·ůl· ůℕl·yãŦ2ℕY l·ůλ2y℗ DAX is used for analysis.

From the **Formula's** answers, we can deduce that the **Balance Sheet Data** does **not** have a Date Column, but it has a Year and a Month column. Using these columns, we can create a new date (with day = 1) and then calculate its corresponding *"last day of the moths",* using the *EndOfMonth* method. As it is shown on the third column from the table below.

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Also, from the table below, the second column shows the result using the *EndOfQuarter* method, this calculates the day after 1 quarter (3 months) from the selected day.

Date	End of Quarter	End of Month
1/01/1959	31/03/1959	31/01/1959
2/01/1959	31/03/1959	31/01/1959
3/01/1959	31/03/1959	31/01/1959
4/01/1959	31/03/1959	31/01/1959

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Question 27

You are creating a column chart visualization. You configure groups as shown in the Groups exhibit.

The visualization appears as shown in the Chart exhibit. For each of the following statements, select Yes if the statement is true. Otherwise, select No.

Answer area

Statements	Yes	No
The data segment into 5 groups.	❍	❍
The data was Split 5 deciles.	❍	❍
To increase the bin size, you must decrease the bin count.	❍	❍

Answer: Yes No Yes

Solution:

- The data is segmented into 5 groups. By setting up the Bin count to 5, Power BI will aggregate the data into 5 groups with same bin sizes.
- The data was split into 5 deciles. Deciles is based on the absolute frequency. By grouping the data points into 5 deciles does not mean that the bin sizes will be equal, because this depends on the frequency.
- To increase the bin size, you must decrease the bin count. By decreasing the bin count means the data will be grouped into less number of bins with a bigger bin size.

Question 28

You are modeling data in table named SalesDetail by using Microsoft Power BI. You need to provide end users with access to the summary statistics about the SalesDetail data. The users require insights on the completeness of the data and the value distributions. Which three actions should you perform in sequence? To answer, enumerate the actions in the correct order. (1 indicates first step).

Answer area

Actions

- ☐ A. Create a query that users Common Data Service as data source
- ☐ B. Create a blank query a data source
- ☐ C. Specify the followign query. = Table.Distinct(#'SaleDetail')
- ☐ D. Select Use First Rows as Headers
- ☐ E. Create a parameter that users a query for the suggested values.
- ☐ F. Specify the following query. = Table.Profile(#'SalesDetail')
- ☐ G. Create a visual for the query table.

Answer: B F G

Solution: From Power Query create any table ´SaleDetail´. Then open the Power Editor and enter the following M-Language line Table.Profile(#'SaleDetail'). Table.Profile. This will create a table summary with statistics from the table SaleDetail. Load the table to Power Desktop and create a visualization to provide insights.

Question 29

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?

Answer area

- ☐ A. Yes
- ☐ B. No

Answer: Yes

Solution:

median and percentile 50 % or second quartile are the same. They all refer to the data point that is greater than 50% of the rest of the data points and 50% less than the rest of the data points.

Question 30

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

Answer area

- ☐ A. the tab order

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

Answer: A

Solution:

Tab order is the order in which users interact with the items on a page using the keyboard.

Setting the tab order helps keyboard users to navigate through your report in an order that matches the way users scroll down the report.

To set the tab order on a report page in Power BI Desktop, go to the View tab, open the Selection Pane and select Tab Order at the top of the Selection Pane.

In general, every object in Power BI that has a keyboard navigation is also compatible for screen readers. When a report consumer navigates through a report, the screen reader will read out the title, visual type, and any alt text that has been set.

Layer Order is used for rendering one visual over another.

Question 31

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

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

Which relationship should you use to link the tables?

Answer area

- A. one-to-many from Transaction to Customer

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

Answer: B

Solution:

Opt A: A transaction can not have many clients.

Opt B: One client can have many transactions.

Opt C: Customer can buy again, generating a new transaction.

OPt D: A transaction can not have many clients.

Question 32

You have a large dataset that contains more than 1 million rows. The table has a datetime column named Date. You need to reduce the size of the data model. What should you do?

Answer area

- A. Round the hour of the Date column to startOfHour.
- B. Change the data type of the Date column to Text.
- C. Trim the Date column.
- D. Split the Date column into two columns, one that contains only the time and another that contains only the date.

Answer: D

Solution:

Separate the date and time if they are bounded together. If any of your tables have columns that combine date and time, make sure that you separate them into distinct columns before importing them into Power BI. This approach will increase compression abilities.

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Question 33

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?

Answer area

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

Answer: B

Solution:

As the question is not expressing that the Subject or the Body are needed, we can avoid them by not importing the columns. This will significantly reduce the model and prevent employees to read sensitive information.

Question 34

You have the tables shown in the following table. 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.

Table name	Column name
Campaings	Campaing_ID
	Name
Ads	Ad_id
	Name
	Campaign_id
Impressions	Impression_id
	Ad_id
	Site_name
	Impression_time
	Impression_date

Answer area

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

Answer: A B

Solution:

Having the following table:

impression_id	ad_id	site_name	impression_time	impression_date
impression_001	ad_001	facebook	9:00	10/02/2020
impression_002	ad_002	facebook	9:00	10/03/2020
impression_003	ad_003	facebook	9:00	10/04/2020
impression_004	ad_004	facebook	9:00	10/05/2020

Transform>GroupBy, this will minimize the data model size.

ad_id	site_name	impression_date	impressioncount
ad_001	facebook	10/02/2020	3
ad_002	facebook	10/03/2020	3
ad_003	facebook	10/04/2020	3
ad_004	facebook	10/05/2020	3

Home>Apply> Model> and create the table relations. One-to-many

Question 35

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?

Answer area

- ☐ A. Yes
- ☐ B. No

Answer: B

Solution:

Median and average are not necessarily the same. The median is the center value of the data points when they are order incrementally. And the average is the result of the addition of all the data points divided by the number of data points.

Sales amounts: 2,3,5,5,6,8,9,11,11
Median = 6

Average = 6.667

Question 36

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

Answer area

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

Answer: D E

Solution:

By having the following report on the first page:

Notice that when selecting the slicer, the interaction with the KPI visualization is off.

Add the configuration so the slicer sync with the other reports.

Question 37

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

Answer area

- ☐ A. Add a measure to the visual that uses the following DAX expression. Measure1 = PERCENTILEX.INC (Sales,Sales[Total Sales],0.40)
- ☐ B. Add a new percentile line that uses Total Sales as the measure and 40% as the percentile.
- ☐ C. Create a horizontal line that has a fixed value of 24,000.
- ☐ D. Add a measure to the visual that uses the following DAX expression. Measure1 = PERCENTILEX.EXC (Sales,Sales[Total Sales],0.40)

Answer: B

Solution:

Select the visualization, got to> the visualization pane> Select Analytics> Select Percentile > Set it as follow:

Question 38

You have the following three versions of an Azure SQLdatabase:

Test

Production

Development

You have a dataset that uses the development database as a data source. You need to configure the dataset so that you can easily change the data source between the development, test, and production database servers from powerbi.com. Which should you do?

Answer area

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

Answer: B

Solution:

From the Power Editor select View>Always allow Parameter.

Whit this option you can create a parameter when importing your data source.

Switch from production to development by selecting a option from the drop box.

Question 39

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

First name

Last name

Email address

State/Region

Phone number

You import the list into Power Query Editor. You need to ensure that the list contains records for each State/Region to which you want to target a marketing campaign. Which two actions should you perform? Each correct answer presents part of the solution. NOTE: Each correct selection is worth one point.

Answer area

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

Answer: C E

Solution:

The dataset have 1500 rows, if you don't enable the column profiling for the entire dataset, the column profiling will be based on the top 1000 rows.

Therefore first enable for entire dataset and after select column profiling for the entire dataset.

Then View>Column profile. As data profile is the most complete for addressing concerns, then C is the answer.

Question 40

You open a query in Power Query Editor. You need to identify the percentage of empty values in each column as quickly as possible.

Which Data Preview option should you select?

Answer area

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

Answer: D

Solution:

data concerns refer to data preview. In this section you have

- *Column distribution*: shows unique and distinct values.
- *Column quality*: shows % of valid, error and empty values.
- *Column profile*: includes column distribution and column quality (DOESN'T SHOW THEPERCENT, SHOWS THE AMOUNT IN TERMS OF COUNTS). Shows statistics values and distribution of the column.

Although the information about empty values appears in *column quality* and in the column profile option, *the question asks for the percentage*, therefore it is column quality.

Question 41

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?

Answer area

- ☐ A. no impact
- ☐ B. highlight
- ☐ C. filter

Answer: B

Solution:

By turning on the highlight filter, you can create a dynamic selection between 2 or more visualizations.
The highlighting option allows to highlight information that belongs to the selection.

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Question 42

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

client_notified_timestamp
client_notified_source
client_notified_sourceid
client_notified_value
client_responded_timestamp
client_responded_source
client_responded_sourceid
client_responded_value

You plan to include only a subset of the returned columns. You need to remove any columns that have a suffix of sourceid. How should you complete the Power Query M code? To answer, select the appropriate options in the answer area.

Answer area

```
let
    Source = ..,
    rawData = Source{[tableId="clientData"]}[Data],
    removeSources =                    (rawData,
                                        (Table.ColumnNames(rawDara),
    each                        (_, "sourceid"))),
in
  removeSources
```

Answer: Table.Remove.Columns, List.Select, Text.EndsWith

Solution:

Even that Text.Contains could also give a correct result, the meaning of *suffix* refers to the ***last characters (sourceid)***.

suffix = morpheme added at the end of a word to form a derivative

Create the Source, then apply the M-script to remove the columns mentioned.

```
let
    Source = #table (type table [
                                    client_notified_timestamp,
                                    client_notified_source,
                                    client_notified_sourceid,
                                    client_notified_value,
                                    client_responded_timestamp,
                                    client_responded_source,
                                    client_responded_sourceid,
                                    client_responded_value],
                                {
                                    {1,1,1,1,1,1,1,1}
                                }
                    ),
    #"Removed Columns" = Table.RemoveColumns(Source,List.Select(Table.ColumnNames(Source),each Text.EndsWith(_,"sourceid")))
in
    #"Removed Columns"
```

client_notified_timestamp	client_notified_source	client_notified_sourceid	client_notified_value	client_responded_timestamp	client_responded_source	client_responded_sourceid	client_responded_value
1	1	1	1	1	1	1	1

Question 43

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?

Answer area

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

Answer: D

Solution:

Admins are the only ones that are allowed to add new users.

Members:

- Can complete all tasks that are associated with admins but cannot add or remove users.
- Cannot delete the workspace.
- Cannot update the metadata about the workspace.

Question 44

You have a CSV file that contains user complaints. The file contains a column named Logged. Logged contains the date and time each compliant occurred. The data in Logged is in the following format: 2018-12-31 at 08:59. You need to be able to analyze the complaints by the logged date and use a built-in date hierarchy.

What 2 actions should you do?

Answer area

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

Answer: C

Solution:

Opt A: This option will show an error.

Opt B: Las 11 characters are not showing the date.

Opt C: By selecting the Logged column and going to Add Column>Column From Examples, you can enter the example of you wish the value to be transform, then Power Editor will recognize automatically the transformation and will apply it to the rest of the columns.

Opt D: Whit not changing to date type you will be not allowed to create hierarchy.

Question 45

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

Customer ID	Email Address
Phone	Address ID

Address contains the following columns:

Address ID	City
Address Line 1	State/Region
Address Line 2	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?

Answer area

- ☐ 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

Solution:

- Append: The append option creates a single table with all the records of the tables appended. All column headers will be aggregated to create the schema for the new appended table.

- Merge: A merge queries operation joins two existing tables together based on matching values from one or multiple columns. You can choose to use different types of joins, depending on the output you want. The following example is a left join from product to category.

Question 46

You have an Azure SQL database that contains sales transactions. The database is updated frequently. You need to generate reports from the data to detect fraudulent transactions. The data must be visible within five minutes of an update.

How should you configure the data connection?

Answer area

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

Answer: B

Solution:

Opt A: SQL statement do not configure database updates.

Opt B: With DirectQuery, Power BI, query directly the data source. This is good when you need to keep your data flow actualize.

Opt C: Command timeout is not directly related with database updates. Timeout refers to how long does Power Query have for completing a query before the connection with the server stops or timeout.

Opt D: By importing your data to Power BI, you will need to import it again every time you want to actualize your data sets.

Question 47

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

Unit Price

Quantity Ordered

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

Which type of visualization and which feature should you use? To answer, select the appropriate options in the answer area. NOTE: Each correct selection is worth one point. How should you configure the data connection?

Answer area

Visualization:	Feature:
▼	▼
A columna chart of Quantity Ordered and Unit Price by year	Automatically find clusters
A line chart of Quantity Ordered and Unit Price by item	Explain the decrease
A scatter plot of Quantity Ordered and Unit Price by item	Find where the the distribution is different

Answer: Visualization: A scatter plot of Quantity Ordered and Unit Price by item, Feature: Automatically find clusters

Solution:

A scatter plot is the best option when you need to visualize the relation between 2 variables and for creating data-clusters. The data points with similar characteristics will be cluster-up.

1. First plot your data points in a scatter plot:

2. Second select the 3 dots from the corner and select “Automatically find clusters.”

Question 48

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?

Answer area

- ☐ 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.

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Answer: B

Solution:

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 (**not only the interception**) of those filters.

Question 49

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

You need to modify the dashboard to appear as shown in the Modified Dashboard exhibit.

What should you do?

Answer area

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

Answer: C

Solution:

As the question is talking about dashboards it refers to Power BI Service.

From the dashboard select Edit>Dashboard Theme> select the dark theme.

Question 50

You have a line chart that shows the number of employees in a department over time. You need to see the total salary costs of the employees when you hover over a data point. What are two possible ways to achieve this goal? Each correct answer presents a complete solution. NOTE: Each correct selection is worth one point.

Answer area

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

Answer: A C

Solution:

Opt A: Select the visual>On the Tooltips field drag and drop salary. Now by hovering on top of the line you can see the salary value.

Opt B: You can add the salary line to the graph, but you will need to round your salary down or create a secondary Y axis.

Opt C: With this option you can navigate from your main report through a detail report. The detail report will filter the visuals depending on the data point selected on the main report.

Question 51

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?

Answer area

- ☐ A. Yes
- ☐ B. No

Answer: B

Solution:

By granting access to all the workspace, users will be able to view/read all dashboards in the workspace. However, the requirement says that users should only read access to **a dashboard (meaning only one)**.

Question 52

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.

Answer area

- ☐ A. Pin items from the reports to the dashboard.
- ☐ B. Rearrange, resize, or remove items from the pone view.
- ☐ C. Change the dashboard view to Phone view.
- ☐ D. Open the dashboard
- ☐ E. Create a pone layout for the existing reports.

Answer: A D C B

Solution:

- Pin items from the reports to the dashboard. Fig 8.
- Open the dashboard. Fig 10.
- Change the dashboard view to Phone view Fig 11.
- Rearrange, resize or remove items from the phone view. Fig 9.

Figure 8

Figure 10

Figure 11

Figure 9

Question 53

You view a query named Transactions as shown in the following exhibit. The query gets CSV files from a folder.

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

Answer area

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

▼
9
10
25
90
1000

There are [answer choice] CSV files:

▼
9
10
25
90
1000

Answer: 9, 10

Solution:

- By the column distribution you can know how many values are distinct or unique. Meaning that distinct will count how many different values are there, and by unique means counting how many values are repeated only once on the column selected.
- There are not unique values for Source.Name, but they are 9 distinct file names.
- There are 10 distinct dates and 0 unique dates, meaning that all days are repeated at least twice. Then if you remove all duplicates there will remain 10 unique values.

Question 54

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?

Answer area

- ☐ 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

Solution:

Opt A: The summarize by employee will only give all the distinct values for employee.

Opt B: By grouping the states in Power BI Desktop is a fast way how to create new categories. Right click on the field you want to group from the Fields pane>New Group> group the elements> OK> drag and drop the new field.

Opt C: You can only use Group with Bins when it is a numerical or a time field. For this case you can only Group with a list, as states are text values.

Opt D: The summarize by employee will only give all the distinct values for state.

Question 55

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

In powerbi.com, when users load the visual, they only see some of the customers.

What is the cause of the issue?

Answer area

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

Answer: Too many records were sent to the visual.

Solution:

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

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

Question 56

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

MonthName	Total Sales	Sales Last Year	% Growth to Last Year
January	£559,263.79	£144,365.51	74.19%
February	£583,915.29	£215,923.28	63.02%
March	£684,091.92	£211,347.46	69.11%
April	£957,686.49	£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%

Answer area

Conditional formatting:

- Background color
- Data bars
- Font color
- Icons
- Web URL

Format by:

- Color scale
- Field value
- Rules

Answer: Conditional formatting: background color, Format by: rules

Solution:

Select the table> go to the visualization pane>Format>Conditional formatting> Select the totalsales from the drop donw box (as this is the column you want to format> Background color: switch on> Advance controls> Set it as follow: Select the table> go to the visualization pane>Format>Conditional formatting> Select the totalsales from the drop donw box (as this is the column you want to format> Background color: switch on> Advance controls> Set it as follow:

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Question 57

You have a query named Customer that imports CSV files from a data lake. The query contains 500 rows as shown in the exhibit. Each file contains deltas of any new or modified rows from each load to the data lake. Multiple files can have the same customer ID. You need to keep only the last modified row for each customer ID. Which three actions should you perform? To answer, select the appropriate actions from the list of actions. Assume that it should be in a correct order.

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

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Answer area

- ☐ A. Filter the Customer query on Modified Dates is Latest.
- ☐ B. Merge the CustomerGroupe query into the Customer query based on Customer ID and Modified Date by using a left outer join.
- ☐ C. Remove duplicates in the Customer ID column.
- ☐ D. Duplicate the Customer query the Customer query and name the new query CustomerGrouped.
- ☐ E. Group the CustomerGrouped query by Customer ID and output the max Modified Date value into a column named Modified Date.
- ☐ F. Merge the two based on Customer ID and Modified Date using and inner join.

Answer: B E F

Solution:

Duplicate the customer query and name the new query CustomerGropped.

Group the CustomerGroupped query by Customer ID and output the max Modified Date value into a column named Modified Date. Go to Transform>Group By> Set it as follow:

customerid	maxdate
1	1/02/2020
2	1/02/2020
3	1/03/2020
4	1/03/2020

Merge the two queries based on Customer ID and Modified Date by using an inner join. Click on the >select

Question 58

You have the line chart shown in the exhibit. You need to modify the chart to meet the following requirements:

Identify months that have order counts above the mean.

Display the mean monthly order count.

Which three actions should you perform? To answer, select the appropriate actions from the list. Assume that it should be in a correct order.

Answer area

- ☐ A. Create a 12 month Rolling average quick measure and add the measure to the line chart value.
- ☐ B. From the Analytics pane, add a Median line.
- ☐ C. Select the line chart.
- ☐ D. From the Analytics pane, add an Average line.
- ☐ E. Turn on data labels for the new line

Answer: C D E

Solution:

- Select the line chart.
- On the visualization pane select Analytics>Average line> Data Label → switch on >Add

Median is not the same as the average, example:

Sales: 2,3,5,5,6,8,9,11,11

Median = 6

Average = 6.667

Question 59

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

What should you use?

Answer area

- ☐ Comments
- ☐ Tiles
- ☐ Microsoft Information Protection sensitivity labels
- ☐ Active Directory groups

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Answer: C

Solution:

Some industries manage sensitive data such as the Healthcare sector. For this type of data, Power BI offers several settings in Power BI Administrative Portal that can impact access to PII. One of them is Microsoft Information Protection sensitivity labels.

When Power BI is connected to a data source with sensitive labels, automatically Power BI inherit the label so that the data remains classified and secure when brought into Power BI.

To enable sensitivity label inheritance from the data sources, go to the Power BI tenant settings, and enable the toggle under Information protection > Apply sensitivity labels from data sources to their data in Power BI (preview):

Options D is also use for security reasons, but it controls access only. Here we want users to access the dashboard and to identified if the dashboard contains PII.

Question 60

You need to create a DAX measure in the data model that only allows users to see projections at the appropriate levels of granularity. How should you complete the measure? To answer, select the appropriate values form the list. Each value may be used once, more than once, or not at all. NOTE: Each correct selection is worth one point.

Answer area

Total Projected Revenue = (

NOT(('Date'[Date])),

(Projection [Revenue Projection]))

Answer: IF, ISFILTERED, SUM

Solution:

Level of granularity refers to the level of detail you want your data to be, example per year, per month or per day.

Appropriate level of granularity: when you do specific filtering, for example you filter 15 days from the month of July, the level of granularity is *not appropriate* as any monthly calculation (for example *SUM for the monthly revenues*), will not be comparable due to the missing data from July.

To avoid this, you can calculate the month where values have not been filter. In this way the level of granularity will be the same and comparable for every monthly calculation. Breaking it down the DAX expression:

ISFILTERED, return TRUE when ColumnName is being filtered directly. NOT BY ANOTHER COLUMN, OR RELATED TABLE.

NOT, will change TRUE to FALSE, FALSE to TRUE,

IF, opens a conditional statement, therefore if the expression *NOT (ISFILTERED ('Date'[Date]))* is TRUE then calculate SUM(Projection[Revenue Projection]).

Question 61

Your company has affiliates who help the company acquire customers. You build a report for the affiliate managers at the company to assist them in understanding affiliate performance. The managers request a visual showing the total sales value of the latest 50 transactions for each affiliate. You have a data model that contains the following tables. You need to develop a measure to support the visual.

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

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

Answer area

Revenue Last 50 Transactions = (

(Transactions [Amount]),

(50, Transactions, Transactions DESC)

Answer: CALCULATE, SUM, TOPN, TransactionDate

Solution:

DAX is used to do custom calculations.

From the question, we need to do a sum calculation and a filter context of the latest 50 transactions. A filter context is any expression that filter the values to be aggregated by conditioning any of the fields from the table.

Breaking down the expression:

As we need a filtering context (latest 50), we must use CALCULATE. CALCULATE, allows to evaluate expressions with a modified filter context. Meaning that the expression calculates the operation considering a filtering event. CALCULATE has the following structure:

CALCULATE(<expression>[<filter1>])

Following with the structure, SUM will aggregate all the transaction amounts.

TOPN, is the filter context. It has the following structure:

TOPN(<n_value>, <table>, <orderBy_expression>)

The result of the TOPN expression will be a list of values which the last 50 dates.

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