

PL- 300 EXAM QUESTIONS WITH ANSWERS | DATAWOLFS

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Q. You have a custom connector that returns ID, From, To, Subject, Body, and Has Attachments for every email sent during the past year. More than 10 million records are returned. You build a report analyzing the internal networks of employees based on whom they send emails to. You need to prevent report recipients from reading the analyzed emails. The solution must minimize the model size. What should you do?

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

Answer – B

Q. You have the tables shown in the following table. Divyansh Khandelwal

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

The Impressions table contains approximately 30 million records per month.

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

- ⇒ Present ad impression counts for the day, campaign, and Site_name. The analytics for the last year are required.
- ⇒ Minimize the data model size.

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

NOTE: Each correct selection is worth one point.

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

Answer A&B



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

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

Answer – B

Q. You open a query in Power Query Editor. You need to identify the percentage of empty values in each column as quickly as possible. Which Data Preview option should you select?

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

Answer - D

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

- First name
- Last name
- Email address
- State/Region
- Phone number

You import the list into Power Query Editor.

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

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

NOTE: Each correct selection is worth one point.

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

Answer C&E



Q. HOTSPOT -

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

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

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

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

How should you complete the Power Query M code? To answer, select the appropriate options in the answer area.

NOTE: Each correct selection is worth one point.

Hot Area:

Answer Area

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

[Hide Solution](#)



Answer Area

```

let

    Source = ...,
    rawData = Source{[tableId= "clientData"]}[Data],
    removeSources = Table.RemoveColumns(
        rawData,
        Table.ColumnNames(rawData),
        List.Select(
            Table.ColumnNames(rawData),
            each Text.Contains(_, "sourceid")))
    in
        removeSources
    
```

Box 1: Table.RemoveColumns -

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

Box 2: List.Select -

Get a list of columns.

Box 3: Text.Contains -

Example code to remove columns with a slash (/):

```

let
    Source = Excel.Workbook(File.Contents("C: Source"), null, true),
    #"1_Sheet" = Source{[Item="1",Kind="Sheet"]}[Data],
    #"Promoted Headers" = Table.PromoteHeaders(#"1_Sheet", [PromoteAllScalars=true]),
    // get columns which contains any slash among values
    ColumnsToRemove =
        List.Select(
            // get a list of all columns
            Table.ColumnNames(#"Promoted Headers"),
            (columnName) =>
                let
                    // get all values of a columns
                    
```



```
ColumnValues = Table.Column(#"Promoted Headers", columnName),  
// go through values and stop when you find the first occurrence of a text containing a slash  
// if there is a value with a slash, return true else false  
ContainsSlash = List.AnyTrue(List.Transform(ColumnValues, each Text.Contains(_, "/")))  
  
ContainsSlash -  
,  
// remove columns  
Result = Table.RemoveColumns(#"Promoted Headers", ColumnsToRemove) in  
  
Result -  
Reference:  
https://community.powerbi.com/t5/Power-Query/Remove-columns-containing-a-certain-value/td-p/759657
```

Q. DRAG DROP -

You are building a dataset from a JSON file that contains an array of documents. You need to import attributes as columns from all the documents in the JSON file. The solution must ensure that date attributes can be used as date hierarchies in Microsoft Power BI reports. Which three actions should you perform in sequence? To answer, move the appropriate actions from the list of actions to the answer area and arrange them in the correct order.

Select and Place:

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

[Hide Solution](#) [Discussion 7](#)



Correct

Answer:

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

You import two Microsoft Excel tables named Customer and Address into Power Query.

Customer contains the following columns:

- Customer ID
- Customer Name
- Phone
- Email Address
- Address ID

Address contains the following columns:

- Address ID
- Address Line 1
- Address Line 2
- City
- State/Region
- Country
- Postal Code

The Customer ID and Address ID columns represent unique rows.

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

What should you do?

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

Answer -A

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

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



hierarchy.

What should you do?

- A. Change the data type of the Logged column to Date.
- B. Apply a transformation 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. Add a conditional column that outputs 2018 if the Logged column starts with 2018 and set the data type of the new column to Whole Number.

[Reveal Solution](#) Answer – A

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

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

How should you configure the data connection?

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

Answer – B

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

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

What should you recommend?

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

Answer -C

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

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

What should you do?



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

Answer -D

Q. DRAG DROP -

You are modeling data in a table named SalesDetail by using Microsoft Power BI.

You need to provide end users with access to the summary statistics about the SalesDetail data. The users require insights on the completeness of the data and the value distributions. Which three actions should you perform in sequence? To answer, move the appropriate actions from the list of actions to the answer area and arrange them in the correct order, Select and Place:

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

[Hide Solution](#) [Discussion 12](#)



Correct

Answers

Actions**Answer Area**

Create a blank query as a data source.

Create a blank query as a data source.

Create a parameter that uses a query for the suggested values.

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

Create a visual on a report page using fields from the new table.



Create a visual on a report page using fields from the new table.

Create a query that uses Common Data Service as a data source.

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

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

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

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

What will the value be when the step is applied?

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

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

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

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

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

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

What should you recommend?

- A. Increase the number of times that the dataset is refreshed.
- B. Split the visuals onto multiple pages.



- C. Change the imported dataset to DirectQuery.
- D. Implement row-level security (RLS).

Answer - C

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

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

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

You need to automate the notifications.

What should you do?

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

Answer – C

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

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

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

During the development process, you need to import a sample of the data from the Order table.

Solution: From Power Query Editor, you import the table and then add a filter step to the query.

Does this meet the goal?

- A. Yes
- B. No

Answer – B

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

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



During the development process, you need to import a sample of the data from the Order table.

Solution: You add a WHERE clause to the SQL statement.

Does this meet the goal?

- A. Yes
- B. No

Answer – A

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

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

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

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

Solution: In the Power Query M code, you replace references to the Excel file with DataSourceExcel.

Does this meet the goal?

- A. Yes
- B. No

Answer is B but people say A

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

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

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

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

Solution: You modify the source step of the queries to use DataSourceExcel as the file path.

Does this meet the goal?

- A. Yes
- B. No

Answer -A



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

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

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

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

Solution: You create a new query that references DataSourceExcel.

Does this meet the goal?

- A. Yes
- B. No

Answer – B

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

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

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

During the development process, you need to import a sample of the data from the Order table.

Solution: You add a report-level filter that filters based on the order date.

Does this meet the goal?

- A. Yes
- B. No

Answer – B

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

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

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

During the development process, you need to import a sample of the data from the Order table.

Solution: You write a DAX expression that uses the FILTER function.

Does this meet the goal?



- A. Yes
- B. No
- Answer – B

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

A line chart that shows the number of defective products manufactured by day.

▪ A KPI visual that shows the current daily percentage of defective products manufactured. You need to be notified when the daily percentage of defective products manufactured exceeds 3%.

What should you create?

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

Answer – D

Q. HOTSPOT -

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



Quick measures

Calculation

Rolling average

Calculate the average of base value over a certain number of periods before and/or after each date.

[Learn more](#)

Base value ⓘ

Add data fields here

Date ⓘ

Add data fields here

Period ⓘ

Days

Periods before ⓘ

1

Periods after ⓘ

0

Fields

Search

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

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

How should you configure the quick measure calculation? To answer, select the appropriate options in the answer area.

NOTE: Each correct selection is worth one point.



Hot Area:

Answer Area

Base value:

Month
Total Cost
Total Order Qty
Total Sales
Year

Date:

Date
Month
Total Sales
Year

Period:

Days
Months
Quarters
Years

[Hide Solution](#)

[Discussion 24](#)



Answer Area

Base value:

Month
Total Cost
Total Order Qty
Total Sales
Year

Date:

Date
Month
Total Sales
Year

Period:

Days
Months
Quarters
Years

Correct Answer:

Box 1: Total Sales -

We select the field Total Sales -

Box 2: Date -

Select a date field.

Box 3: Month -

Monthly periods.

Reference:

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

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

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

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

A sales manager changes to a different region.



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

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

Answer – C

Q. DRAG DROP -

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

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

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

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

NOTE: Each correct selection is worth one point.

Select and Place:

Values

ALL

ALLSELECTED

CALCULATE

CALCULATETABLE

CURRENTGROUP

DIVIDE

SUMMARIZE

TOPN

Answer Area

Product Category % of Total 2 =

[] ([Total Sales],

[] ([Total Sales] ,

[] (

Product [ProductCategoryName])))


[Hide Solution](#) [Discussion 56](#)

Correct

Answer:

Values

- ALL
- ALLSELECTED
- CALCULATE
- CALCULATETABLE
- CURRENTGROUP
- DIVIDE
- SUMMARIZE
- TOPN

Answer Area

```
Product Category % of Total 2 =
CALCULATE ([Total Sales],
DIVIDE ([Total Sales],
ALLSELECTED (
Product[ProductCategoryName] ) ) )
```

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

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

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

Which data modeling design should you use?

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

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



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

You import the tables.

Which relationship should you use to link the tables?

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

Answer – C

Q. OTSPOT -

You have a Power BI report.

You need to create a calculated table to return the 100 highest spending customers.

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

NOTE: Each correct selection is worth one point.



Hot Area:

Answer Area

Top 100 Customers =

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

[Hide Solution](#)

[Discussion 17](#)



Correct

Answer Area

Top 100 Customers =

ASC[
DESC(
FILTER(
SUMMARIZE[
TOPN(

100,

```
(FactTransaction,  
FactTransaction[Customer ID],  
"Sales",  
SUM(FactTransaction[Sale])),  
[Sales],
```

ASC
DESC
FILTER
SUMMARIZE
TOPN

DESC

Answer:

Box 1: TOPN -

TOPN returns the top N rows of the specified table.

Box 2: SUMMARIZE -

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

Box 3: DESC -

Sort in descending order.

Q. HOTSPOT -

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

- CustomerID
- Customer City
- Customer State
- Customer Name



Customer Address 1

Customer Address 2

Customer Postal Code

The Invoice table contains the following fields:

Order ID

Invoice ID

Invoice Date

Customer ID

Total Amount

Total Item Count

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

The Power BI model must provide the following information:

The number of customers invoiced in each state last month

The average invoice amount per customer in each postal code

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

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

NOTE: Each correct selection is worth one point.

Hot Area:

Answer Area

Cardinality:

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

Cross-filter direction:

Both
Single

[Hide Solution](#)

[Discussion](#) 6



Answer Area

Cardinality:

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

Cross-filter direction:

Both
Single

Correct Answer:

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

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

City[State Province] = "Kentucky"

Role2 contains the following filter.

Date[Calendar Year] = 2020 -

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

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

Answer = B

HOTSPOT -

Your company has affiliates who help the company acquire customers.

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



affiliate performance.

The managers request a visual showing the total sales value of the latest 50 transactions for each affiliate. You have a data model that contains the following tables.

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

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

You need to develop a measure to support the visual.

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

NOTE: Each correct selection is worth one point.

Hot Area:

Answer Area

```
Revenue Last 50 Transactions =
```

(

CALCULATE
CONCATENATEX
SUM
SUMX
TOPN

(Transactions [Amount]),

CALCULATE
CONCATENATEX
SUM
SUMX
TOPN

(50, Transactions, Transactions

CALCULATE
CONCATENATEX
SUM
SUMX
TOPN

TransactionID]
[Amount],
[ItemsOrdered],
[TransactionDate],

DESC)

)

Answer -Calculate, SUM , TOPn

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

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

Customer Count = DISTINCTCOUNT(Customer[CustomerID])

Users frequently refer to customers as subscribers.



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

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

Answer – B, Some people say C

HOTSPOT -

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

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

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

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

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

NOTE: Each correct selection is worth one point.

Hot Area:

Answer Area

Cardinality:

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

Cross-filter direction:

Single	▼
Both	▼


[Hide Solution](#) | Discussion 94

Answer Area

Cardinality:

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

Cross-filter direction:

Single
Both

Correct Answer:

Box 1: One-to-many -

Box 2: Both -

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

Note:

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

Reference:

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

Visualize the Data

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

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

- A. The visual was built by using a different version of R.
- B. The data comes from a Microsoft SQL Server source.



- C. The data is deduplicated.
- D. Too many records were sent to the visual.

Answer – D

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.

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

Answer AB, but it should be AC

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

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

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

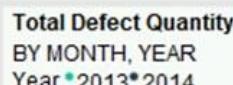
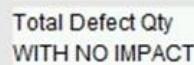
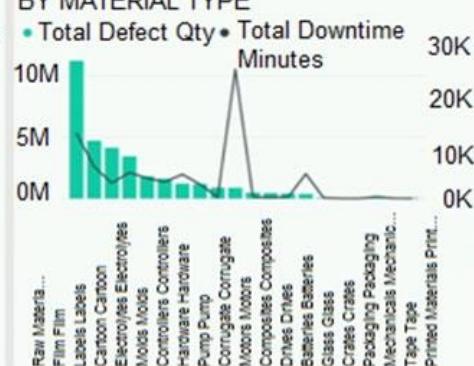
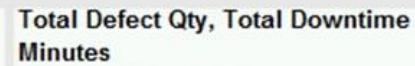
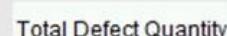
- A. no impact
- B. highlight
- C. filter

Answer – B

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

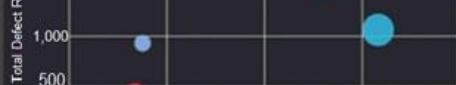
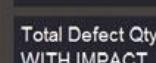
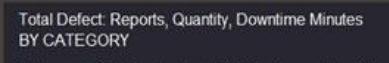
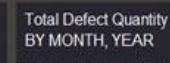
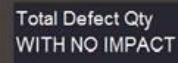
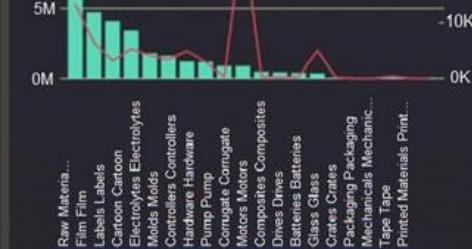
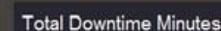
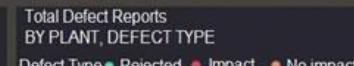


□ Ask a question about your data



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

Ask a question about your data



What should you do?

- A. Edit the details of each tile.



- B. Change the report theme.
- C. Change the dashboard theme. **Most Voted**
- D. Create a custom CSS file.

DRAG DROP -

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

You need to build the dashboard.

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

Select and Place:

Actions**Answer Area**

Pin items from the reports to the dashboard.



Rearrange, resize, or remove items from the phone view.

Change the dashboard view to **Phone view**.

Open the dashboard.

Create a phone layout for the existing reports.

[Hide Solution](#) [Discussion 48](#)

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

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

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



- D. Funnel chart

Answer – B

HOTSPOT -

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

Unit Price

Quantity Ordered

You need to create a visualization that shows the relationship between Unit Price and Quantity Ordered. The solution must highlight orders that have a similar unit price and ordered quantity. Which type of visualization and which feature should you use? To answer, select the appropriate options in the answer area.

NOTE: Each correct selection is worth one point.

Hot Area:

Answer Area

Visualization:

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

Feature:

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

[Hide Solution](#)

[Discussion 25](#)



Correct

Answer Area

Visualization:

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

Feature:

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

Answer:

Box 1: A scatter plot...

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

Box 2: Automatically find clusters

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

Reference:

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

05. You need to ensure that users can effectively navigate your reports by using the keyboard. Which property should you configure?

- a) Bookmarks
- b) Layer order
- c) Mobile layout
- d) Tab order

Answer – D

06. You've created a report that you published to a workspace. A few business users need to have the ability to view the reports. What's the most appropriate way to achieve this?

Your solution must consider that the report audience may change in the future and that you've already created other reports in the workspace that will be ready to be shared at a later date.

- a) Share an app with individual users.
- b) Share an app with a security group.
- c) Share report from workspace with individuals.
- d) Give the users the Viewer role in the workspace.



Answer – B

08. You have a Power BI tenant. You have reports that use financial datasets and are exported as PDF files. You need to ensure that the reports are encrypted. What should you implement?

- a) dataset certifications
- b) row-level security (RLS)
- c) sensitivity labels
- d) Microsoft Intune policies

Answer -C

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

(*Get Data in Power BI*)

DAX

T-SQL

MDX

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

How should you connect?

(*Get Data in Power BI*)

Connect Live

Import

Direct Query

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

(*Get Data in Power BI*)

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

Use the Select SQL statement in your SQL queries when you are pulling data from a relational database

Combine date and time columns into a single column

Do some calculations in the original data source

Which storage mode leaves the data at the data source?

(*Get Data in Power BI*)



Import

Direct Query

Dual

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

(Get Data in Power BI)

Query folding

Adding index columns

Adding custom columns with complex logic

What type of import error might leave a column blank?

(Get Data in Power BI)

Keep errors

Unpivot columns

Data type error

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

- Test
- Production
- Development

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

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

Which should you do?

(Get Data in Power BI)

Create a JSON file that contains the database server names. Import the JSON file to the dataset.

Create a parameter and update the queries to use the parameter.

Create a query for each database server and hide the development tables.

Set the data source privacy level to Organizational and use the ReplaceValue Power Query M function.

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?

(*Get Data in Power BI*)

Add a SQL statement.

Set Data Connectivity mode to DirectQuery.

Set the Command timeout in minutes setting.

Set Data Connectivity mode to Import.

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

(*Get Data in Power BI*)

PBIDS Files

JSON Files

Dataflows

SSAS Tabular

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

(*Get Data in Power BI*)

Data Gateway

Dual Storage Mode

Parameters

Admin Privileges

Which of the following sources can Power BI connect to?

(*Get Data in Power BI*)

SQL Database

Google Analytics

R scripts

All of the above

Answer is **All of the above**

Power BI can connect to virtually any type of data source, including (but not limited to) SQL databases, R scripts, and Google Analytics.

What is the Query Editor used for?

(*Get Data in Power BI*)

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



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

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

(*Get Data in Power BI*)

Import

DirectQuery

Dual

Native

When should you use DirectQuery?

(*Get Data in Power BI*)

The source data never changes

Company policy states no data source restrictions

Dataset is too large to be stored in-memory

All of the above

Answer is **Dataset is too large to be stored in-memory**

Use DirectQuery when the dataset is too large to be stored in-memory, when the source data changes frequently & reports must show the most recent data, and when the company policy states data can only be accessed from the original source.

When would you need to access the Data Source Settings?

(*Get Data in Power BI*)

If you need to connect to a new data source

If you need to edit an existing query

If the file name or location changes

All of the above

How can you use parameters when connecting to data?

(*Get Data in Power BI*)

To connect to a JSON file

To change data source values dynamically

To create "What-If" scenarios



To shape and transform data in the Query Editor

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

(Get Data in Power BI)

Microsoft Dataverse

Microsoft Dataplatfrom

Microsoft Dataflows

Microsoft Excel

Answer is **Microsoft Dataverse**

The Dataverse is a cloud-based storage options for your organization's data that you can connect to business applications like Power Apps, Power Automate, and Power Virtual Agents

You have a Microsoft Excel spreadsheet that contains a table named Sales. You need to add the Sales table to a Power BI dashboard as a tile.

How should you configure the tile?

(Get Data in Power BI)

From the Power BI service, import the data from the Excel workbook.

From Excel, publish the workbook to the Power BI service.

From the Power BI tab in Excel, pin the table.

From the Power BI service, upload the Excel workbook.

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

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

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

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

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

(Get Data in Power BI)

Create a new connection to SQLProd, and then import the tables from SQLProd.

Delete the existing queries, and then add new data sources.



Configure the Data source settings.

Edit the source of each table query.

Check the answer and show the description

Answer is **Configure the Data source settings.**

Query Editor >> Data Source setting as well as through Query editor >> Query Setting >> Source.

So both option C and D are justified. But its required least amount of administrative effort so will go for option C.

Reference:

<https://www.c-sharpcorner.com/article/how-to-change-data-source-of-existing-report-in-power-bi/>

You plan to create several datasets by using the Power BI service.
You have the files configured as shown in the following table.

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

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

Which two files should you identify?

(Get Data in Power BI)

Data 1

Data 2

Data 3

Data 4

Data 5

Check the answer and show the description



Answer is **2 and 4**

- a) TSV is not supported via Power BI Service, and in question it clearly says "by using Power BI Service".
- b) XLSX 3 gb will not work for Pro licence, but it will work for Premium licence. In question there is no mention about licence type so this option will work for some customers, for some not. Partially correct.
- c) XML is not supported via Power BI Service, and in question it clearly says "by using Power BI Service".
- d) CSV, same as xlsx 3gb, it will work for Premium licence. Partially correct.
- e) JPG is not supported via Power BI Service.

For XML Table (.xml) or text (.txt) files, you must load that data into an Excel or Power BI Desktop file first. You can then import the Excel or Power BI Desktop file into Power BI Service.

There's a 1-GB limit for datasets stored in Shared capacities in the Power BI service. If you need larger datasets, you can use Power BI Premium.

References:

<https://docs.microsoft.com/en-us/power-bi/service-get-data>

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

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

(*Get Data in Power BI*)

Retrieve rows from a dataset

Create a dataset

Add rows to a dataset

Refresh an imported dataset

Add a member to a row-level security role

Check the answer and show the description

Answer is **A-B-C**

The Power BI REST API has the following operations:

- Dataset operations: Get and create Datasets.
- Table operations: Get Tables and update Table schema.
- Row operations: Add Rows and Delete Rows.



- Group operations: Get Groups

Reference:

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

You have a service published to a website.

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

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

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

Which type of source should you use?

(*Get Data in Power BI*)

JSON

Text/CSV

OData Feed

XML

Check the answer and show the description

Answer is **OData Feed**

OData supports two formats for representing the resources (Collections, Entries, Links, etc) it exposes: the XML-based Atom format and the JSON format.

Reference:

<https://www.odata.org/documentation/odata-version-2-0/atom-format/>



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

(*Get Started with Microsoft Data Analytics*)

Data analyst

Data scientist

Data engineer

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

(*Get Started with Microsoft Data Analytics*)

Analyze

Visualize

Model

What is a key benefit of data analysis?

(*Get Started with Microsoft Data Analytics*)

Decisive analytics

Informed business decisions

Complex reports

What are the building blocks of Power BI?

(*Get Started with Microsoft Data Analytics*)

Tiles, dashboards, databases, mobile devices

Visual Studio, C#, and JSON files

Datasets, Visualizations, Reports, Dashboards, and Tiles

What is the common flow of activity in Power BI?

(*Get Started with Microsoft Data Analytics*)

Bring data into Power BI Desktop and create a report, share it to the Power BI service, view and interact with reports and dashboards

Bring data into Power BI mobile, create a report, then share it to Power BI Desktop.

Create a report in the Power BI service, share it to Power BI mobile, interact with it in Power BI Desktop.



Create a report in Power BI mobile, share it to the Power BI Desktop, view and interact in the Power BI service.

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

(*Get Started with Microsoft Data Analytics*)

The canvas

An app

A dataset

Scheduled refresh

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

(*Get Started with Microsoft Data Analytics*)

SharePoint Online

Microsoft Dataverse

Power BI Libraries

Filing Cabinets

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

(*Clean, Transform, and Load Data in Power BI*)

Report editor

Power Query editor

Data editor

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

(*Clean, Transform, and Load Data in Power BI*)

Group by columns

Pivot (pivoting a column)

Manage aggregations

Check Pivot is correct answer

Data profiling is defined as what?

(*Clean, Transform, and Load Data in Power BI*)

Aggregating columns containing numeric data



Studying the nuances of the data

Data modeling

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

(*Clean, Transform, and Load Data in Power BI*)

DAX expressions that MAX data will be incorrect

DAX expressions that SUM data will be incorrect

DAX expressions that AVERAGE data will be incorrect

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

(*Clean, Transform, and Load Data in Power BI*)

Rename columns to have spaces in them

Replace values that have integers with human readable results

Abbreviated column names

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

(*Clean, Transform, and Load Data in Power BI*)

Advanced editor

Data profiling

Queries pane

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?

(*Clean, Transform, and Load Data in Power BI*)

Open the Advanced Editor.

Select Column quality.



Enable Column profiling based on entire dataset.

Select Column distribution.

Select Column profile.

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

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

What should you do?

(*Clean, Transform, and Load Data in Power BI*)

Change the data type of the Logged column to Date.

Apply the Parse function from the Date transformations options to the Logged column.

Create a column by example that starts with 2018-12-31 and set the data type of the new column to Date.

Apply a transform to extract the first 11 characters of the Logged column.

You have a Microsoft SharePoint Online site that contain several document libraries. One of the document libraries contains manufacturing reports saved as Microsoft Excel files. All the manufacturing reports have the same data structure.

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

What should you do?

(*Clean, Transform, and Load Data in Power BI*)

Get data from a SharePoint Online folder, enter the site URL, and then select Combine & Load.

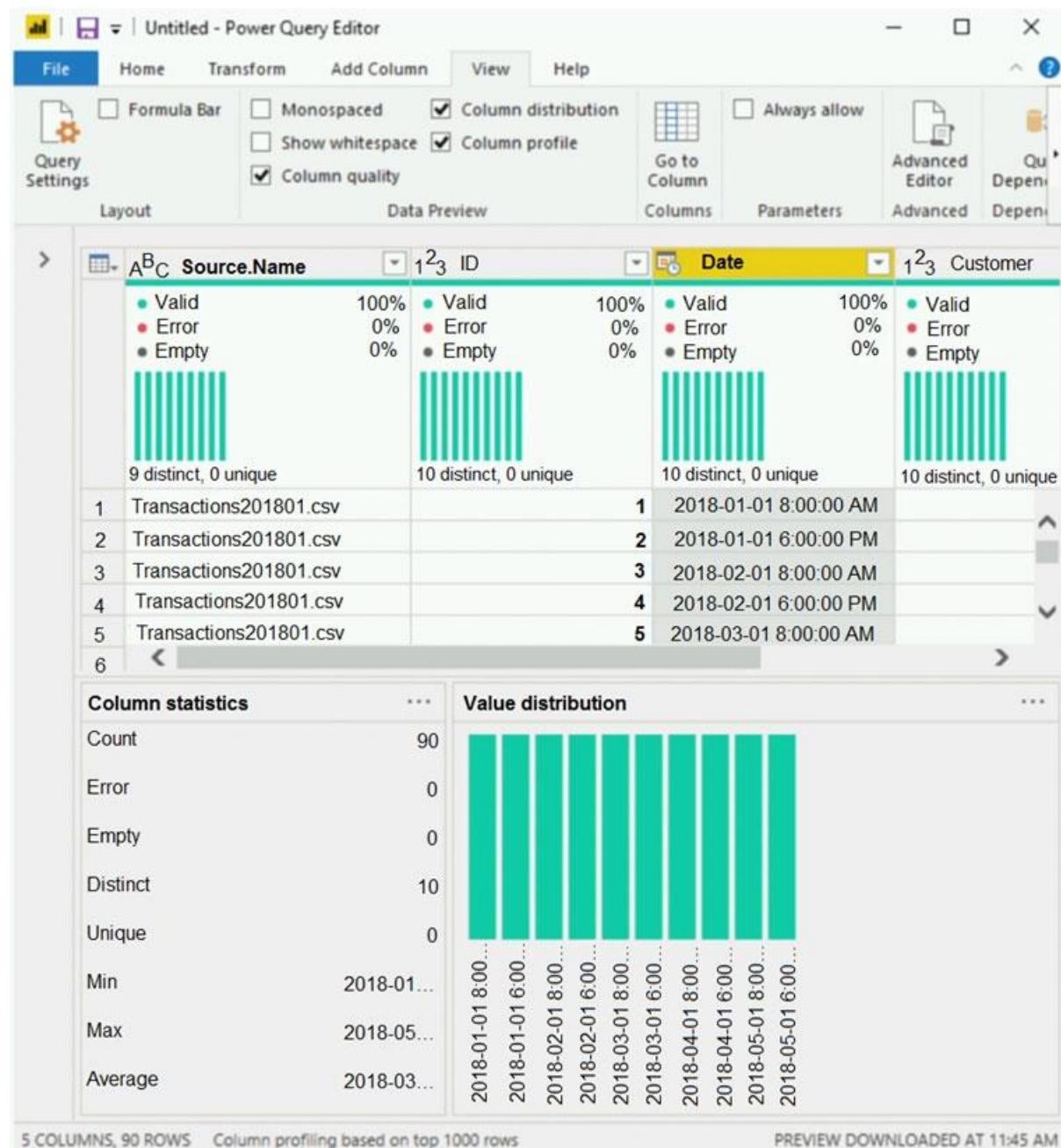
Get data from a SharePoint Online list and enter the site URL. Select Combine & Transform, then filter by the folder path to the manufacturing reports library.

Get data from a SharePoint Online folder and enter the site URL. Select Combine & Transform, then filter by the folder path to the manufacturing reports library.

Get data from a SharePoint Online list, enter the site URL, and then select Combine & Load.



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



The query gets CSV files from a folder.

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



Answer Area

There are [answer choice] CSV files:

	▼
9	
10	
25	
90	
1,000	

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

	▼
9	
10	
25	
90	
1,000	

(Clean, Transform, and Load Data in Power BI)

Check the answer and show the description

Box 1: 9

9 distinct CSV files.

Box 2: 10

10 distinct dates.

Which data profiling tools does Power Query have?

(Clean, Transform, and Load Data in Power BI)

Column from examples, custom column, and conditional column

Column quality, distribution, and profile

Index column and duplicate column

Format, extract, and parse

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

(Clean, Transform, and Load Data in Power BI)

Column quality

Column distribution

Column profile



Column quality & column profile

What can the column distribution be used for?

(*Clean, Transform, and Load Data in Power BI*)

- To identify errors
- To identify empty values
- To identify primary keys
- All of the above

What is the purpose of data profiling in Power Query?

(*Clean, Transform, and Load Data in Power BI*)

- Provide a visual way to explore data
- Get a sense of your dataset composition
- To solve column quality issues
- All of the above

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

(*Clean, Transform, and Load Data in Power BI*)

- Column quality
- Column distribution
- Column profile
- Column statistics

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

(*Clean, Transform, and Load Data in Power BI*)

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

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

(*Clean, Transform, and Load Data in Power BI*)

- Adding a column from examples



Grouping data

Adding an index column

Appending queries

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

(*Clean, Transform, and Load Data in Power BI*)

Column from examples

Conditional column

Custom column

Index column

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

(*Clean, Transform, and Load Data in Power BI*)

Merging Queries

Appending Queries

Group By

Pivot Columns

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

(*Clean, Transform, and Load Data in Power BI*)

Pivot

Unpivot

Transpose

Group By

Which of these statements is NOT true about merging queries?

(*Clean, Transform, and Load Data in Power BI*)

Merging queries allows you to join tables based on a common column

Merging adds columns to an existing table

You should merge tables whenever possible

You can merge queries by different join kinds (left outer, inner, etc.)



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

(*Clean, Transform, and Load Data in Power BI*)

do & while

if & then

for & each

let & in

Check the answer and show the description

Answer is **let & in**

Opening the advanced editor allows you to see the M code that makes up your query, which consists of two blocks: let (the definition of all variables) & in (the output of your query)

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

(*Clean, Transform, and Load Data in Power BI*)

Select the Return type column > Transform > Replace values

Select the Return type column > Transform > Fill down

Select the Return type column > Add column > Column from example

Select the Return type column > Home > Remove rows

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

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

What should you do from Power BI Desktop?

(*Clean, Transform, and Load Data in Power BI*)

Add the following filters to a report. CountryRegionName is United States

ProductCategory is Clothing

From Power BI Desktop, create a new role that has the following filters.

[CountryRegionName] = "United States" [ProductCategory] = "Clothing"



Add the following filters in Query Editor. CountryRegionName is United States
ProductCategory is Clothing

From Power BI Desktop, create a new role that has the following filter.

[CountryRegionName] = "United States" && [ProductCategory] = "Clothing"

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

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

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

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

What should you do?

(Clean, Transform, and Load Data in Power BI)

Add a column named Country that contains United States as the value.

Add a column for longitude and a column for latitude.

Select the Zone field. From the Modeling tab, change the Data Category.

Select the Zone field. From the Modeling tab, change the Data Type.

Check the answer and show the description

Answer is **Select the Zone field. From the Modeling tab, change the Data Category.**

This is a common problem when the data in your location field is ambiguous, such as using an area name like Washington, which could indicate a state or a district.

One way to resolve the location data problem is to rename your column to be more specific, such as State. Another way is to manually reset the data category by selecting Data Category on the Modeling tab. From the Data Category list, you can assign a category to your data



such as "State" or "City."

References:

<https://docs.microsoft.com/en-us/power-bi/guided-learning/visualizations#step-5>

You have a query that retrieves data from a Microsoft Azure SQL database. You discover that a column named ErrorCode has several values starting with a space character, and a column named SubStatus contains several non-printable characters. You need to remove all the leading whitespaces from ErrorCode and all the non-printable characters from SubStatus. All other data must be retained.

What should you do on each column?

Answer Area

ErrorCode:

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

SubStatus:

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

Answer – Trim & Clean

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

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

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



City
London
Paris
Madrid
Montreal

What should you do?

(Clean, Transform, and Load Data in Power BI)

From the Format menu, click Trim.

From the Extract menu, click Last Characters.

From the Split Column menu, click By Delimiter.

From the Extract menu, click Text After Delimiter.

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

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

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

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

What should you do?

(Clean, Transform, and Load Data in Power BI)

Delete the query, import the data into Microsoft SQL Server, and then import the data from SQL Server.

In Query Editor, add a calculated column that totals the sales amount column.

Change the Data Type of sales amount column to Numeric.

Refresh the data model.

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

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



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

The query retrieves 25,499 records.

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

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

What should you do?

(*Clean, Transform, and Load Data in Power BI*)

From Query Editor, refresh all the data.

Change the query to use Live connection mode.

Delete the Remove Duplicates step.

Add an Unpivot Columns step.

What is Cardinality?

(*Design a Data Model in Power BI*)

Cardinality is how long it takes for the data to load

Cardinality is the granularity of the data

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

Cardinality is a type of visual element

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

(*Design a Data Model in Power BI*)

Role-playing dimension

Snowflake dimension

Degenerate dimension



What type of table stores details about business entities?

(Design a Data Model in Power BI)

Fact table

Dimension table

Date table

Data table

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

Quick measures

Calculation

Rolling average

Calculate the average of base value over a certain number of periods before and/or after each date.

[Learn more](#)

Base value

Add data fields here

Date

Add data fields here

Period

Days

Periods before

1

Periods after

0

Fields

Search

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

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

How should you configure the quick measure calculation?



Answer Area

Base value:

Month
Total Cost
Total Order Qty
Total Sales
Year

Date:

Date
Month
Total Sales
Year

Period:

Days
Months
Quarters
Years

(Design a Data Model in Power BI)

Check the answer and show the description

Box 1: Total Sales

We select the field Total Sales

Box 2: Date

Select a date field.

Box 3: Month

Monthly periods.

Reference:

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



You have sales data in a star schema that contains four tables named Sales, Customer, Date, and Product. The Sales table contains purchase and ship dates. Most often, you will use the purchase date to analyze the data, but you will analyze the data by both dates independently and together. You need to design an imported dataset to support the analysis. The solution must minimize the model size and the number of queries against the data source.

Which data modeling design should you use?

(*Design a Data Model in Power BI*)

Use the Auto Date/Time functionality in Microsoft Power BI and do NOT import the Date table.

Duplicate the Date query in Power Query and use active relationships between both Date tables.

On the Date table, use a reference query in Power Query and create active relationships between Sales and both Date tables in the modeling view.

Create an active relationship between Sales and Date for the purchase date and an inactive relationship for the ship date.

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

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

You import the tables.

Which relationship should you use to link the tables?

(*Design a Data Model in Power BI*)

many-to-many between Customer and Transaction

one-to-many from Transaction to Customer

one-to-many from Customer to Transaction

one-to-one between Customer and Transaction

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



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

The Invoice table contains the following fields:

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

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

The Power BI model must provide the following information:

- The number of customers invoiced in each state last month
- The average invoice amount per customer in each postal code

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

What should you configure?

Answer Area

Cardinality:

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

Cross-filter direction:

Both
Single



Answer – One to Many Single

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

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

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

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

How should you configure the relationships from Products to ProductCategory?

Answer Area

Cardinality:

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

Cross-filter direction:

Single
Both

(Design a Data Model in Power BI)

Check the answer and show the description

Box 1: One-to-many

Box 2: Single

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

Reference:



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

Which of these is NOT a data model best practice?

(*Design a Data Model in Power BI*)

Use a star schema with many-to-many relationships

Contain relationships with one-way filters (vs. bidirectional)

Contain tables that each serve a specific purpose, including data (fact) tables and lookup (dim) tables

Only include the data you need for analysis (no redundant or unnecessary records or fields)

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

(*Design a Data Model in Power BI*)

Merging creates redundant data

Merging uses more memory

Merging uses more processing power

Merging keeps metrics and dimensions in separate tables

Which of the following statements is true regarding filter flow?

(*Design a Data Model in Power BI*)

By default, the filter direction will point from the "one" side of the relationship to the "many" side

When you filter a table, the filter context is passed along to all related "downstream" tables.

Filters cannot flow "upstream"

All of the above

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

(*Design a Data Model in Power BI*)

RELATED

RELATEDTABLE

USERELATIONSHIP

ACTIVATE



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

(Design a Data Model in Power BI)

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

Cannot contain duplicate dates

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

All of the above

You are creating a report in Power BI Desktop.

You are consuming the following tables.

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

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

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

What should you do?

(Design a Data Model in Power BI)

Union Fiscal and Date as one table.

Add Fiscal to the model and create a one-to-many relationship by using Date[Year] and Fiscal[Year].

Add Fiscal to the model and create a one-to-one relationship by using Date[Year] and Fiscal[Year].

Merge Fiscal into the Date table.



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

- Product (Product_id, Product_Name)
- Sales (Order_id, Order_Date, Product_id, Salesperson_id, Sales_Amount)
- Salesperson (Salesperson_id, Salesperson_name, address)

The model has the following relationships:

- Sales to Product
- Sales to Salesperson

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

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

What should you do before you create the report?

(Design a Data Model in Power BI)

Create a one-to-one relationship between Product and Salesperson.

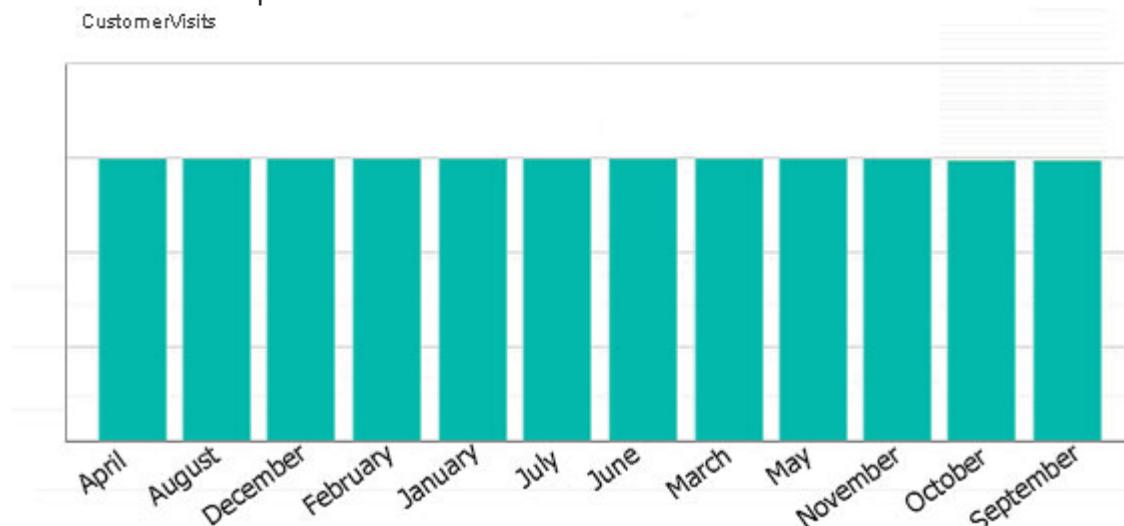
For each relationship, change the Cross filter direction to Both.

For each relationship, change the Cardinality to One to one (1:1).

Change a many-to-one relationship between Product and Salesperson.

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

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



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

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



What should you do?

(Design a Data Model in Power BI)

Modify the measure to use the CALCULATE DAX function.

Create a relationship between the CustomerVisits table and the Date table.

Modify the measure to use the sum DAX function.

Create a hierarchy in the Date table.

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

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

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

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

(Design a Data Model in Power BI)

Format, and then Clean

Date, and then Earliest

Fill, and then Down

Replace Values, and then Replace Errors

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

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



You create a stacked column chart visualization that displays ProductName by Date. You discover that the axis for the visualization displays all the individual dates. You need to ensure that the visualization displays ProductName by year and that you can drill down to see ProductName by week and day.

What should you do first?

(*Design a Data Model in Power BI*)

Create a new table that has columns for the date, year, week, and day.

Create a new hierarchy in the Sales table.

Format the visualization and set the type of the X-Axis to Categorical.

Configure a visual filter for the Date column that uses an advanced filter.

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

(*Creating Measures using DAX in Power BI*)

SUMX

CALCULATE

ALL

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

(*Creating Measures using DAX in Power BI*)

Additive

Aggregate

Semi-additive

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

(*Creating Measures using DAX in Power BI*)

TOTALYTD and PREVIOUSMONTH

CALCULATE and TOTALTYD

CALCULATE and PREVIOUSMONTH

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

- client_notified_timestamp
- client_notified_source
- client_notified_sourceid
- client_notified_value



- client_responded_timestamp
- client_responded_source
- client_responded_sourceid
- client_responded_value

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

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

How should you complete the Power Query M code?

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

Answer Area

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

(Creating Measures using DAX in Power BI)

Check the answer and show the description

Box 1: Table.RemoveColumns

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

Box 2: List.Select

Get a list of columns.



Box 3: Text.EndsWith

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

- Customer ID
- Customer Name
- Phone
- Email Address
- Address ID

Address contains the following columns:

- Address ID
- Address Line 1
- Address Line 2
- City
- State/Region
- Country
- Postal Code

The Customer ID and Address ID columns represent unique rows.

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

What should you do?

(Creating Measures using DAX in Power BI)

Merge the Customer and Address tables.

Transpose the Customer and Address tables.

Group the Customer and Address tables by the Address ID column.

Append the Customer and Address tables.

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?

(Creating Measures using DAX in Power BI)

Split the model into multiple models.

Hide unused columns in the model.

Merge tables by using Power Query.

Transpose.

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

Answer Area

Top 100 Customers =

```
ASC[  
DESC(  
FILTER(  
SUMMARIZE[  
TOPN(  
100,  
(FactTransaction,  
FactTransaction[Customer ID],  
"Sales",  
SUM(FactTransaction[Sale]))),  
[Sales],  
ASC  
DESC  
FILTER  
SUMMARIZE  
TOPN
```

(Creating Measures using DAX in Power BI)

Answer – TOPN, Summarize, Desc

Your company has affiliates who help the company acquire customers.

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



affiliate performance.

The managers request a visual showing the total sales value of the latest 50 transactions for each affiliate. You have a data model that contains the following tables.

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

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

You need to develop a measure to support the visual.

How should you complete the DAX expression?

Answer Area

Revenue Last 50 Transactions =

```

CALCULATE
CONCATENATEX
SUM
SUMX
TOPN

CALCULATE
CONCATENATEX
SUM
SUMX
TOPN

CALCULATE
CONCATENATEX
SUM
SUMX
TOPN

DESC)

)

```

(Creating Measures using DAX in Power BI)

Check the answer and show the description

Box 1: CALCULATE

Start with CALCULATE and use a SUMX.

CALCULATE evaluates an expression in a modified filter context.

Box 2: SUM



Box 3: TOPN

TOPN returns the top N rows of the specified table.

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

Box 4: [TransactionID]

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

(Creating Measures using DAX in Power BI)

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

SUMX('Returns', 'Returns'[quantity returned])

CALCULATE([Total Returns], ALL(Returns))

SUM(Returns[quantity returned])

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

(Creating Measures using DAX in Power BI)

Table.AddColumn(#"Inserted Day Name", "Start of Week", each Date.StartOfWeek([Date].Day.Sunday), type date)

Table.AddColumn(#"Inserted Day Name", "Start of Week", each Date.StartOfWeek([Date].Day.Monday), type date)

Table.AddColumn(#"Inserted Day Name", "Start of Week", each Date.EndOfWeek([Date].Day.Sunday), type date)

Table.AddColumn(#"Inserted Day Name", "Start of Week", each Date.EndOfWeek([Date].Day.Tuesday), type date)

Which of the following is NOT true about measures?

(Creating Measures using DAX in Power BI)

They are evaluated based on row context

They reference entire tables or columns

They aren't visible within tables

They recalculate in response to any change to filters within the report



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

(*Creating Measures using DAX in Power BI*)

Rows

Columns

Values

Filters

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

(*Creating Measures using DAX in Power BI*)

Logical Functions

Filter Functions

Stats Functions

Iterator Functions

Check the answer and show the description

Answer is **Iterator Functions**

Iterator (or "X") functions allow you to loop through the same calculation on each row of a table, and then apply some sort of aggregation to the results (SUM, MAX, etc.).

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

(*Creating Measures using DAX in Power BI*)

CALCULATE

SUMX

RELATED

REPLACE

Check the answer and show the description



Answer is **CALCULATE**

CALCULATE modifies and overrules any competing filter context!

Which of the following functions removes filter context?

(*Creating Measures using DAX in Power BI*)

CALCULATE

ALL

FILTER

All of the above



Check the answer and show the description

Answer is **ALL**

Instead of adding filter context, ALL removes it; use it when you need unfiltered values that won't react to changes in filter context (i.e. % of Total, where the denominator needs to remain fixed)



Which of the following functions returns a table?

(*Creating Measures using DAX in Power BI*)

TOPN

FILTER

DATEADD

All of the above



Which of the following is NOT true about CALCULATE modifiers?

(*Creating Measures using DAX in Power BI*)

They are used to change filter context

They are used to access inactive table relationships

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

They are used to change the way filters propagate



Which of the following functions allows you to calculate running totals?
(Creating Measures using DAX in Power BI)

DATESYTD

DATEADD

DATESINPERIOD

All of the above

Check the answer and show the description

Answer is **DATESINPERIOD**

DATESINPERIOD allows you to calculate running totals. DATESYTD is allows you to calculate performance to-date, and DATEADD allows you to calculate for a previous period.

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

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

You have the following measure.

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

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

Current Year Sales



You need to create the measure for the goal.

How should you complete the DAX formula?



Values	Answer Area
CALCULATE	Value ([Total Sales This Year], Value ('Date'[Date],-1,YEAR))
DATEADD	
PREVIOUSYEAR	
SAMEPERIODLASTYEAR	
SUMX	

(Creating Measures using DAX in Power BI)

Check the answer and show the description

Answer is **CALCULATE - DATEADD**

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

- Sales(Sales_ID, sales_date, sales_amount, CustomerID)
- Customer(CustomerID, First_name, Last_name)

There is a relationship between Sales and Customer.

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

Which DAX formula should you use?

(Creating Measures using DAX in Power BI)

RANKX(ALL(Sales), SUMX(RELATEDTABLE(Customer), [Sales_amount]))

TOPN(ALL(customer), SUMX(RELATEDTABLE(Sales), [Sales_amount]))

RANKX(ALL(customer), SUMX(RELATEDTABLE(Sales), [Sales_amount]))

RANK.EQ(Sales[sales_amount], Customer[CustomerID])

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

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



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

Which DAX formula should you use in Power BI Desktop?

(Creating Measures using DAX in Power BI)

FORMAT([Date], "MMM") & " " & FORMAT([Date], "DD") & ", " & FORMAT([Date], "YYYY")

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

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

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

Check the answer and show the description

Answer is **FORMAT([Date], "MMMM DD, YYYY")**

FORMAT function using "MMM" produces the short name version of month (eg. Jan, Feb, Mar etc.). If the full month name is required, simply replace "MMM" with "MMMM"

You are creating a work schedule for a retail store.

You have the following data from a query named Schedule.

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

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

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

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

**Values**

COUNTA	COUNTROWS
COUNTX	LOWER
UNICHAR	UPPER

Answer Area

Schedule Display
=
IF (
 Value (Schedule) > 0,
 Value (9635), "")

(Creating Measures using DAX in Power BI)

Check the answer and show the description

Answer is **Schedule Display = IF(COUNTROWS(Schedule) > 0, UNICHAR(9635), " ")**

COUNTX(table,expression)
COUNTAX(table,expression)
COUNTROWS(table)
COUNTA(column)
COUNT(column)

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

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

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

How should you complete the DAX formula?

Values

CALCULATE	COUNTA
COUNTX	COUNT
COUNTROWS	FILTER

Answer Area

```
LargerSales = Value (
    Value ('FactInternetSales', 'FactInternetSales' [SalesAmount]>1000))
```

(Creating Measures using DAX in Power BI)

Check the answer and show the description



Answer is **COUNTROWS** and **FILTER**

COUNTROWS(FILTER('Europe','Europe'[City]= "UK - London"))

Alternate:

COUNTX(Europe,FILTER(Europe,Europe[City] = "UK - London"))

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

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

Which DAX function should you use?

(*Creating Measures using DAX in Power BI*)

LASTDATE

TOTALYTD

SAMEPERIODLASTYEAR

PREVIOUSYEAR

DATEADD

F. DATESVTD

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

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



How should you complete the DAX formula?

Values

ALLEXCEPT	DATEDIFF
LASTNONBLANK	DATEADD
LASTDATE	

Answer Area

```
Last12monthSales=  
Var varlast12m=  
CALCULATE ( [Value] ( [Value] (Sales[OrderDate]  
,SUM(Sales  
[SalesAmount]))  
)  
,-12  
,MONTH)
```

What benefit do you get from analyzing metadata?

(Optimizing Model Performance)

The benefit of analyzing metadata is that you can clearly identify data inconsistencies with your dataset.

The benefit of analyzing the metadata is to get familiar with your data.

The benefit of analyzing the metadata is to know the number of rows, columns and tables being loaded into your model.

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

(Optimizing Model Performance)

Q&A.

Column profiling.

Performance analyzer.

What is cardinality?

(Optimizing Model Performance)

Cardinality is the granularity of the data.

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

Cardinality is a type of visual element.

Cardinality is a term that is used to describe the uniqueness of the values in a column. Relationship cardinality refers to the number of rows from one table that are related to another (one to one, one to many, many to many).



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

(Optimizing Model Performance)

Direct query

Query reduction

Query diagnostics

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

(Optimizing Model Performance)

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

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

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

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

(Optimizing Model Performance)

The important and most meaningful data

Disabling interactive analysis over big data

Larger cache size and decreased query performance

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

(Optimizing Model Performance)

The storage mode of your aggregation

The granularity (level) on which to create them.



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

The Impressions table contains approximately 30 million records per month.

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

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

Which two actions should you perform?

(Optimizing Model Performance)

Group the impressions by Ad_id, Site_name, and Impression_date. Aggregate by using the CountRows function.

Create one-to-many relationships between the tables.

Create a calculated measure that aggregates by using the COUNTROWS function.

Create a calculated table that contains Ad_id, Site_name, and Impression_date.

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?

(Optimizing Model Performance)

Change any DAX measures to use iterator functions.

Replace the default visuals with AppSource visuals.

Change the imported dataset to DirectQuery.

Remove unused columns from tables in the data model.



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

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

What should you do?

(Optimizing Model Performance)

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

Trim the Date column.

Round the hour of the Date column to startOfHour.

Change the data type of the Date column to Text.

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

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

`Customer Count = DISTINCTCOUNT(Customer[CustomerID])`

Users frequently refer to customers as subscribers.

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

What should you do?

(Optimizing Model Performance)

Set Summarize By to None for the CustomerID column.

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

Add a synonym of "subscriberID" to the CustomerID column.

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

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

(Optimizing Model Performance)

Fix incorrect data types

Add axis labels to all the charts

Add missing relationships between tables

Add synonyms to tables and columns

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



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

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

Sales	Region
1000	Canada
500	Italy
800	Spain
1200	US

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

(Optimizing Model Performance)

the Data Category of Region

the Default Summarization on Region

the Default Summarization on Sales

the Data Category of Sales

You need to create a custom visualization for Power BI.

What should you install first?

(Optimizing Model Performance)

jQuery

Node.js

Microsoft Azure PowerShell

Microsoft.NET

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?

(Creating Reports)

Add a salary to the tooltips.

Add a salary to the visual filters.

Add salary to the drillthrough fields.



You have a table that contains sales data and approximately 1,000 rows.
You need to identify outliers in the table.

Which type of visualization should you use?

(Creating Reports)

donut chart

pie chart

area chart

scatter plot

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

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

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

What should you include on the menu page?

(Creating Reports)

Create a text box for each business question and insert a link.

Create a button for each business question and set the action type to Bookmark.

Create a Power Apps visual that contains a drop-down list. The drop-down list will contain the business questions.

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

(Creating Reports)

Show changes in values over time

Show patterns in large sets of data

Show comparisons across categories

All of the above

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

(Creating Reports)

Visual level

Page level

Report level

Drill through



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

(Creating Reports)

Categorical Slicer

Date Slicer

Top N Filter

Report Level Filter

You have a workspace that contains 10 dashboards. A dashboard named Sales Data displays data from two datasets. You discover that users are unable to find data on the dashboard by using natural language queries.

You need to ensure that the users can find data by using natural language queries.

What should you do?

(Creating Reports)

From the settings of the workspace, modify the Language Settings.

From the Sales Data dashboard, set the dashboard as a Favorite.

From the properties of the datasets, modify the Q&A and Cortana settings.

From the properties of the dashboard, modify the Q&A settings.

You have a Power BI report that displays a bar chart and a donut chart on the same page. The bar chart shows the total sales by year and the donut chart shows the total sale by category.

You need to ensure that when you select a year on the bar chart, the donut chart remains unchanged.

What should you do?

(Creating Reports)

Edit the interactions from the Format menu.

Set a visual level filter on the bar chart.

Set a visual level filter on the donut chart.

Add a slicer to the page that uses the year column.

You have a Power Pivot model that includes a KPI.

You need to create a visualization based on the Power Pivot model as shown in the exhibit.



Year	Month	RevenueTY	RevenueTY Goal	RevenueTY Status
2013	August	\$4,689,121	\$4,521,528	●
	September	\$5,284,376	\$5,455,457	●
	October	\$5,962,371	\$6,418,957	●
	November	\$5,532,316	\$5,770,254	●
	December	\$6,714,041	\$6,771,982	●
	2014			
2014	January	\$6,748,259	\$6,924,711	●
	February	\$6,999,557	\$7,328,599	●
	March	\$8,938,044	\$8,196,823	●
	April	\$8,518,611	\$8,142,711	●
	May	\$7,982,229	\$7,817,442	●
	June	\$9,183,416	\$9,227,351	●
	July	\$7,451,696	\$7,593,963	●
	August	\$8,068,372	\$7,791,851	●
	September	\$7,669,263	\$7,919,924	●
	October	\$7,813,739	\$7,592,288	●
	November	\$10,322...	\$9,857,259	●

Which type of visualization should you use?

(Creating Reports)

matrix

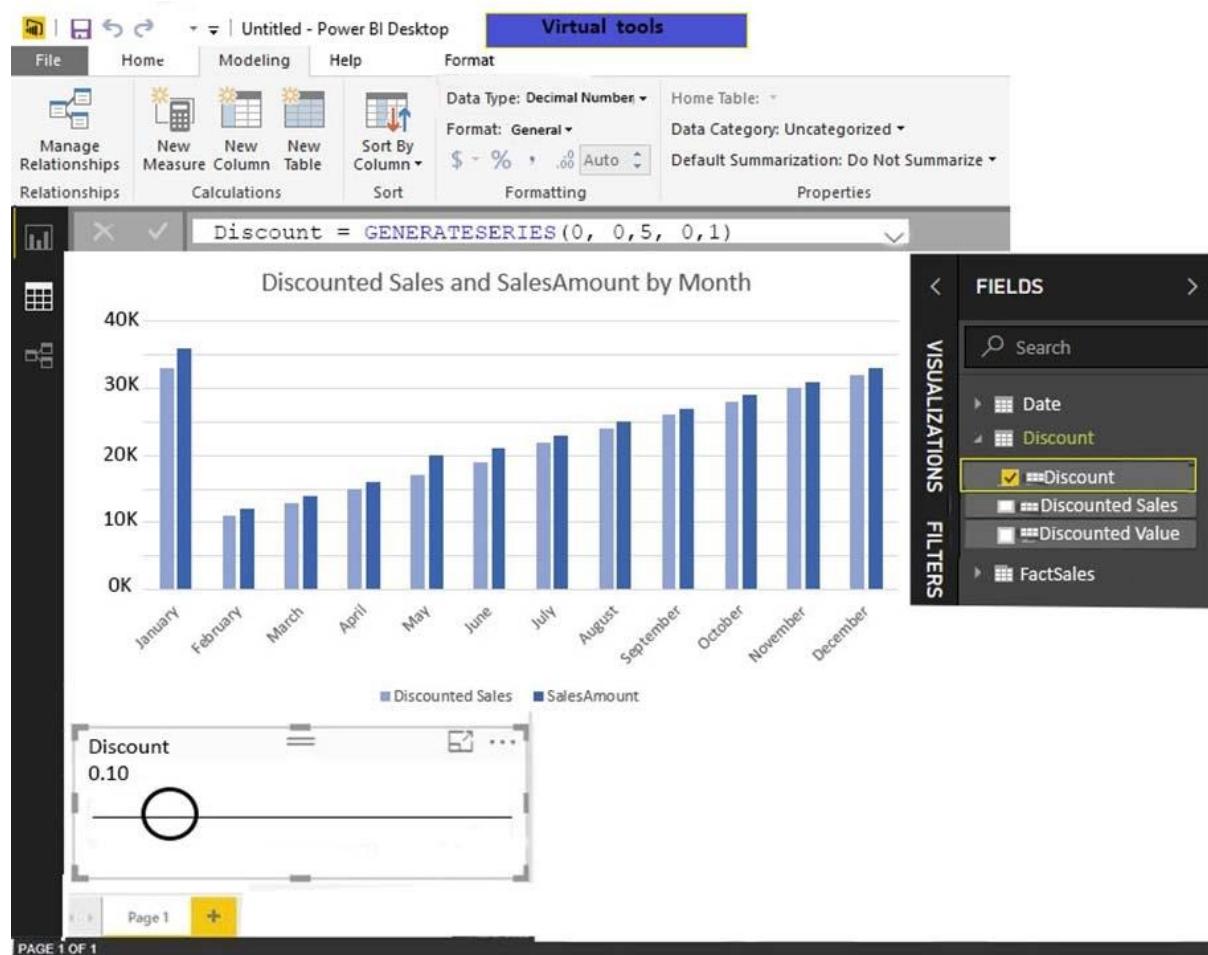
KPI

multi row card

table



You have the report 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.



Answer Area

Discount[Discount] was created by using the [answer choice] command.

New Column
New Measure
New Parameter
New Table

The maximum value for the Discount slicer is [answer choice].

0.1
0.5
1
50

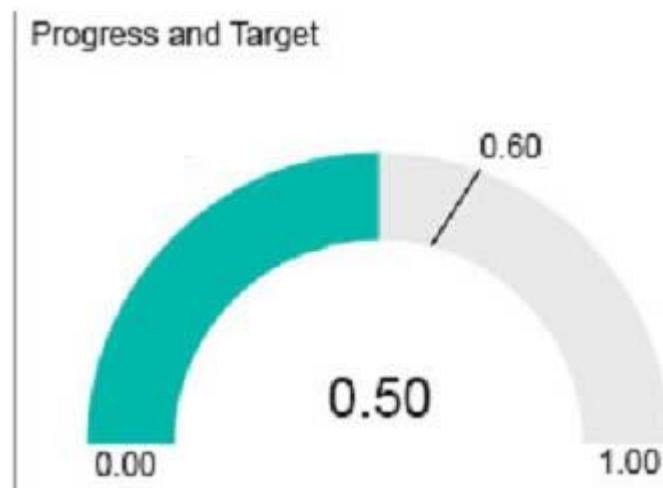
(Creating Reports)

Check the answer and show the description

Answer is **New Parameter and 0,5**.

When using New Parameter it automatically creates GENERATESERIES function. Second, in GENERATESERIES function the second parameter is the max value which is 0,5.

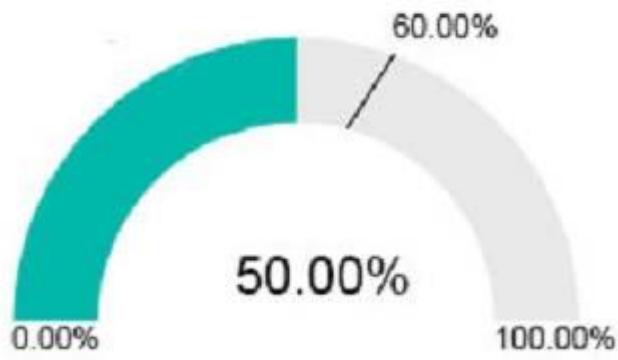
You have the visualization shown in the following exhibit.



You need to display the values as shown in the following exhibit.



Progress and Target



What should you do?

(Creating Reports)

Create a calculated column that adds the % symbol to the values.

From the Modeling tab, change the Data Type to Percentage.

Edit the query of the data source and change the Data Type to Percentage.

Create a measure that adds the % symbol to the values.

You create a KPI visualization in Power BI Desktop that uses the month as the trend axis.

You discover that the data is not sorted by month.

You need to change the sort order of the visualization.

What should you do first?

(Creating Reports)

Convert the visualization to a different type.

Remove the trend axis from the visualization.

Modify the visual level filters.

Modify the drillthrough filters.

You are creating a Power BI Desktop report that has several bar charts and a date slicer.

You need to create a slide show that can be viewed from the Power BI service. Each slide must display the charts filtered for a different year.

What should you do before you publish the report?

(Creating Reports)

Configure report level filters, and then create groups that use the List group type.



Configure drillthrough filters for each bar chart, and then select Selection Pane.

Filter the bar charts by using the slicer, and then create bookmarks.

Configure page level filters, and then create groups that use the Bin group type.

You have three Power BI Desktop projects named Report1.pbix, Report2.pbix, and Report3.pbix that have the following characteristics:

- Report1.pbix contains a custom visualization.
- Report2.pbix implements row level security.
- Report3.pbix connects to a Microsoft SQL Server database by using DirectQuery.

Which reports support Publish to Web, and which reports can be published to Power BI Report Server?

Reports	Answer Area
Report1 only	Reports that support Publish to web:
Report3 only	Report
Report1 and Report3	Reports that can be published to Power BI Report Server:
Report2 and Report3	Report

(Creating Reports)

Check the answer and show the description

Publish to Web: Report1 and Report3

Reports not supported are based on live connection sources, not DirectQuery ones

Limitations ... "Reports using any Live Connection data source"

<https://docs.microsoft.com/en-us/power-bi/collaborate-share/service-publish-to-web#limitations>

Power BI Report Server: Report1, Report2 and Report3 (custom visuals are supported, except for R and Python ones, RLS is supported and DirectQuery too)

<https://docs.microsoft.com/en-us/power-bi/report-server/compare-report-server-service>

Power BI Report Server: Row-level security (RLS) is Available in both DirectQuery (data source) & Import mode

What is a dashboard?

(Creating Dashboards)



A canvas of report elements that can be built in Power BI desktop.
Dashboards can be built by using visuals that are developed with an underlying data source.

A canvas of report elements that can be built in the Power BI service.
The canvas in which you can view the data model of a report.

What is one way that reports and dashboards differ?

(Creating Dashboards)

In reports, you can have multiple pages; in dashboards, you can have only one page.
In reports, you can use the slicers and filter by selecting a data point on a visual; in dashboards, you can only filter a dashboard tile in focus mode, but can't save the filter.

You can only build reports and dashboards in Power BI service.
They are the same.

Can a dashboard be created from multiple reports?

(Creating Dashboards)

No, dashboards can only be created from a single dataset or report.
Yes, dashboards can be created from multiple datasets or reports.

Where can you configure and set alerts?

(Creating Dashboards)

Data alerts can be set only in Power BI service on specific visuals such as KPI cards, gauges, and cards.

Data alerts can be set in both Power BI service and Power BI Desktop on any kind of visual.

Data alerts can be set in Power BI service on any kind of visual.

Data alerts can be set only in Power BI Desktop on specific kinds of visuals such as KPI cards and gauges.

What is a key benefit of Power BI's real-time streaming capabilities?

(Creating Dashboards)

Users are limited to the data refresh as established by the developer.

You can stream data and update dashboards as soon as the data is logged.



Pinning an entire report page to a dashboard ensure what?

(Creating Dashboards)

Users are seeing individual tiles displaying key results.

Pinning a page is an easy way to pin more than one visualization at a time. Also, when you pin an entire page, the tiles are live; you can interact with them right there on the dashboard.

What feature in dashboards is used to alert consumers to the sensitivity of the data?

(Creating Dashboards)

Dashboard themes

Data classification

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

A line chart that shows the number of defective products manufactured by day.

- A KPI visual that shows the current daily percentage of defective products manufactured.

You need to be notified when the daily percentage of defective products manufactured exceeds 3%.

What should you create?

(Creating Dashboards)

a Q&A visual

a subscription

a smart narrative visual

an alert

Which of the following is not an option when editing report interactions?

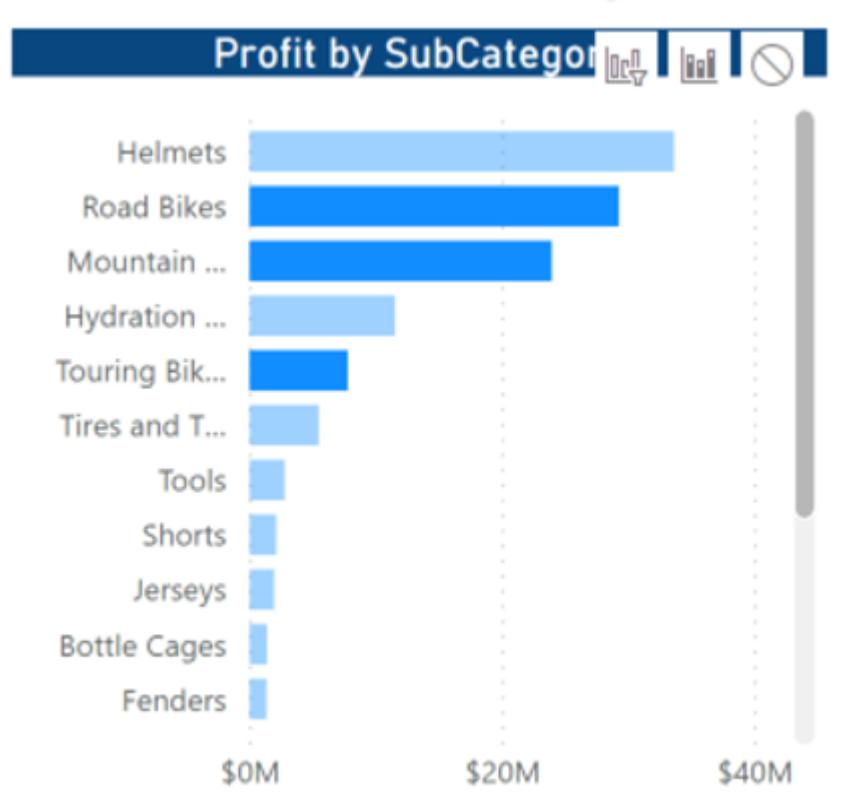
(Creating Dashboards)

Filter

Highlight

None

Drill through



What type of visual interaction has been applied to the bar chart above?

(Creating Dashboards)

Filter

Highlight

Subfilter

None of the above

What allows users to jump to different report pages while simultaneously filtering based on the specific item selected?

(Creating Dashboards)

Drill through filters

Tooltips

R visuals

Page filters

What do bookmarks accomplish in Power BI?

(Creating Dashboards)

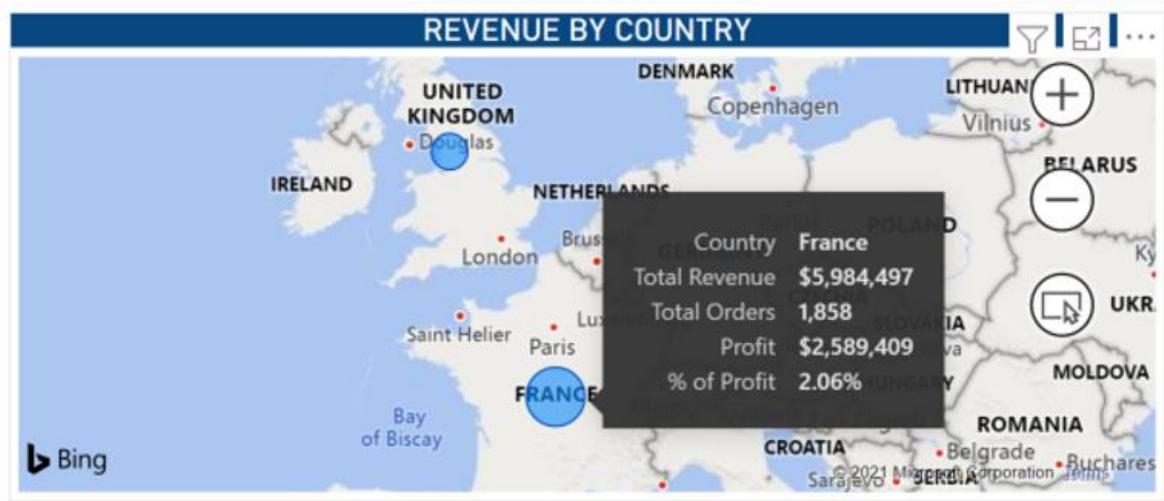
They save a query for use in other reports



They save a subsegment of your data table as a separate file

They save a pre-filtered view of your report

They save your chart as a template



What type of visual interaction is shown in the map above?

(Creating Dashboards)

Highlight

Bookmark

Drill through filter

Tooltip

Which of the following actions requires you to be signed in to Power BI?

(Creating Dashboards)

Importing custom visuals

Linking bookmarks

Editing report interactions

All of the above

Which of the following options is part of Power BI's accessibility features?

(Creating Dashboards)

Themes

Layer order

Tab order

All of the above



Which of the following objects cannot be pinned as an individual tile to a dashboard?
(Creating Dashboards)

Filled Maps

Tables

Slicers

Bar Charts

Which of the following is a benefit of pinning a live page?

(Creating Dashboards)

Slicers are imported

Functionality is preserved

Updates to the report are reflected

All of the above

You create a report in the Power BI service that displays the following visualizations:

- A KPI that displays the count of customers
- A table that displays the count of customers by country
- A line chart that displays the count of customers by year

You need to receive an alert when the total number of customers reaches 10,000.

What should you do first?

(Creating Dashboards)

Pin the line chart to a dashboard.

Pin the KPI to a dashboard.

Embed the report into a Microsoft SharePoint page.

Pin the report to a dashboard.

You have a sales report in an app workspace. The report displays a map of sales by location and a bar chart of sales by year. The report has a slicer to filter the data by year.

You need to create a dashboard that contains visualizations. The solution must ensure that you can use the slicer to filter the data by year.

What should you do?

(Creating Dashboards)

Pin each visualization to the dashboard, and then add a web content tile.



Add a page level filter, and then pin each visualization to the dashboard.

Publish the app workspace.

Pin the report as a live page.

You create a report in the Power BI service.

You plan to provide external users with access to the report by publishing the report to a public blog.

You need to ensure that the report in the blog post will be updated as the data is refreshed.

What should you do in the Power BI service?

(Creating Dashboards)

Publish the app workspace to the entire organization. In the blog post, use the URL of the workspace.

Share the report. In the blog post, use the URL of the dashboard.

Publish the report to the web. In the blog post, use the embed code URL.

In the blog post, use the URL of the report.

You need to create a dashboard in the Power BI service to display data from a PubNub source.

What should you do?

(Creating Dashboards)

Add a Microsoft SQL Server Analysis Services (SSAS) data source that uses Connect live and create a report. Pin the report to a dashboard.

Create an app workspace and publish the workspace to a dashboard.

Add a Microsoft Azure SQL database data source that uses DirectQuery and create a report. Pin the report to a dashboard.

Add a custom streaming data tile to a dashboard.

Answer is **Add a custom streaming data tile to a dashboard.**

For pubnub data, we can visualize it using data tile on dashboard and configure pubnub as data source.

Reference:

<https://docs.microsoft.com/en-us/power-bi/connect-data/service-real-time-streaming#streaming-dataset>



Why are parameters important in Power BI paginated reports?

(*Create Paginated Reports in Power BI*)

They are required so that Power BI can call the paginated report.

They allow the report developer to control the refresh interval of the report.

They allow the user to control aspects of how the report is rendered when the report is run.

Power BI paginated reports are created by using which tool?

(*Create Paginated Reports in Power BI*)

Power BI Report Builder

Power BI Desktop

Power BI Service

Power BI paginated reports is an evolved technology that was built from which original tool?

(*Create Paginated Reports in Power BI*)

SQL Server Analysis Services

Microsoft SharePoint

SQL Server Reporting Services

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?

(*Create Paginated Reports in Power BI*)

The visual was built by using a different version of R.

The data comes from a Microsoft SQL Server source.

The data is deduplicated.

Too many records were sent to the visual.

Check the answer and show the description



Answer is **Too many records were sent to the visual.**

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

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

Reference:

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

You have a report that contains four pages. Each page contains slicers for the same four fields.

Users report that when they select values in a slicer on one page, the selections are not persisted on other 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?

(*Create Paginated Reports in Power BI*)

Replace the slicers with report-level filters.

Sync the slicers across the pages.

Create a bookmark for each slicer value.

Replace the slicers with page-level filters.

Replace the slicers with visual-level filters.

You are developing a report page. Some users will navigate the report by using a keyboard, and some users will consume the report by using a screen reader.

You need to ensure that the users can consume the content on a report page in a logical order.

What should you configure in Microsoft Power BI Desktop?

(*Create Paginated Reports in Power BI*)

the tab order

the layer order

the bookmark order

the X position



What Power BI feature can give an in-depth analysis of the distribution of data?
(Perform Advanced Analytics)

The Next Level of Hierarchy feature can give in-depth analysis because it will allow you to drill down for all subcategories and is not used to analyze the distribution.

The Analyze feature allows a user to understand why the distribution of data looks the way it does.

Only time series analysis can provide in-depth analysis on the data.

Check the answer and show the description

Answer is **The Analyze feature allows a user to understand why the distribution of data looks the way it does.**

Where are time series charts located?

(Perform Advanced Analytics)

The filter pane is where all filters on visuals and pages are located.

The fields pane is where all charts are located.

Time series charts can be imported from AppSource.

What does the AI splits feature do?

(Perform Advanced Analytics)

AI splits work by considering all the available fields and determining which one to drill into to get the highest/lowest value of a measure that is being analyzed.

AI splits work by considering all available fields and determining which one to drill into to get the highest/lowest value of the measure that is being analyzed.

AI splits only display the difference between highest and lowest value of the measure that is being analyzed.

Check the answer and show the description

Answer is **AI splits work by considering all the available fields and determining which one to drill into to get the highest/lowest value of a measure that is being analyzed.**



Can you access the Q&A feature by using buttons?

(Perform Advanced Analytics)

Yes, you can, but you will need to add the Q&A visual to your reporting canvas and then link your button with the visual that you have added.

Yes, you can access the Q&A feature by selecting the Q&A button type.

No, to use the Q&A feature, you will need to add the Q&A visual to your reporting canvas.

What is not a feature of the Q&A feature?

(Perform Advanced Analytics)

Searching for help topics about Power BI.

Adding new synonyms to fields through Q&A tooling.

Converting a Q&A answer into a visual inside your report.

What does the decomposition tree not enable you to do?

(Perform Advanced Analytics)

Conduct root cause analysis to understand a measure better.

Conduct what-if analysis with built-in parameters.

Automatically analyze selected dimensions to find where a measure is highest or lowest.

You have a table that contains the following three columns:

- City
- Total Sales
- Occupation

You need to create a key influencers visualization as shown in the exhibit.



Key influencers Top Segments

What influences Total Sales to Increase ?

When... ...the average of Total Sales increases by

Occupation is Professional → **£3.41K**

← Total Sales is more likely to increase when Occupation is Professional than otherwise (on average).

A bar chart titled 'Average of Total Sales' on the Y-axis (ranging from £0K to £10K) and 'Occupation' on the X-axis. The chart shows five bars: Professional (teal, highest at ~£10.5K), Skilled Manual (dark grey, ~£8.5K), Clerical (dark grey, ~£7.8K), Management (dark grey, ~£7.2K), and Manual (dark grey, ~£6.5K). A dashed horizontal line is drawn at approximately £7.5K.

Occupation	Average of Total Sales (£)
Professional	~£10.5K
Skilled Manual	~£8.5K
Clerical	~£7.8K
Management	~£7.2K
Manual	~£6.5K

Only show values that are influencers

How should you configure the visualization?



Answer Area

Analyze:	<table border="1"><tr><td>City</td></tr><tr><td>Occupation</td></tr><tr><td>Total Sales</td></tr></table>	City	Occupation	Total Sales
City				
Occupation				
Total Sales				

Explain by:	<table border="1"><tr><td>City</td></tr><tr><td>Occupation</td></tr><tr><td>Total Sales</td></tr></table>	City	Occupation	Total Sales
City				
Occupation				
Total Sales				

Expand by:	<table border="1"><tr><td>City</td></tr><tr><td>Occupation</td></tr><tr><td>Total Sales</td></tr></table>	City	Occupation	Total Sales
City				
Occupation				
Total Sales				

(Perform Advanced Analytics)

Check the answer and show the description

Box 1: Total Sales

Box 2: Occupation

Box 3: City

Total Sales is what we analyze, we explain by occupation and expand by city.

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

Reference:

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



You have the dataset shown in the following exhibit.

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

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

What should you do?

(Perform Advanced Analytics)

Add a Top N filter to the visual.

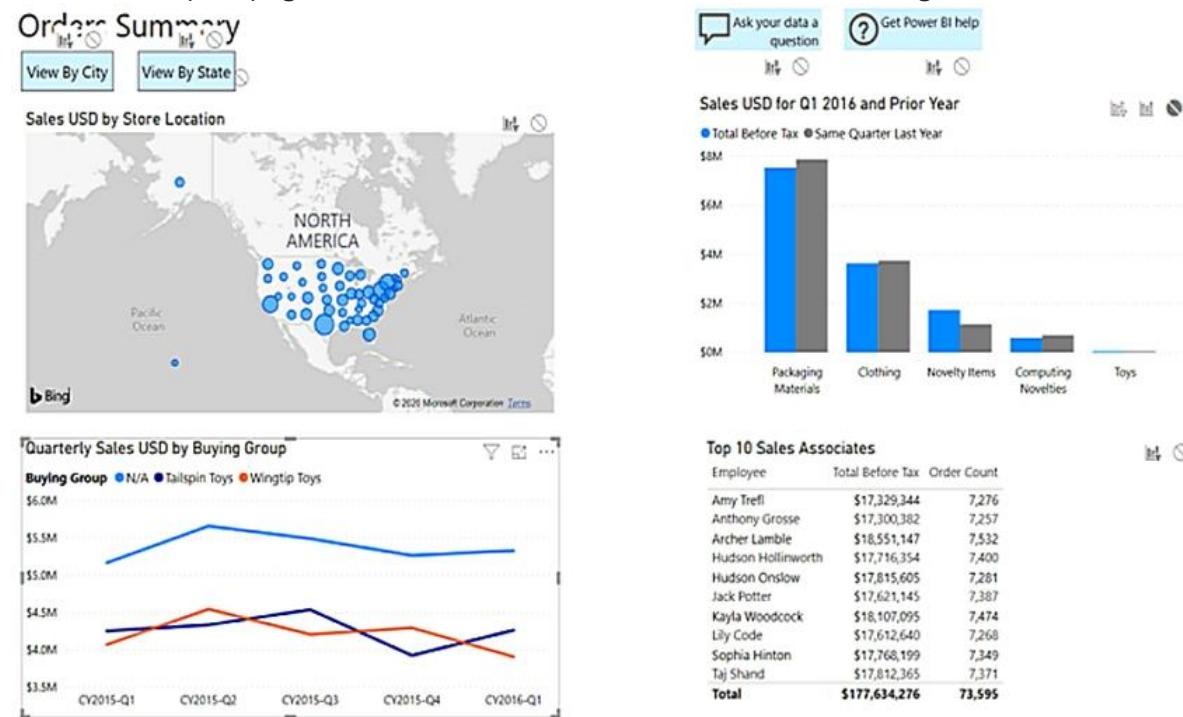
Configure the Sales Profit measure to use the RANKX function.

Add a calculated column to the table that uses the TOPN function. In the visual, replace Sales Profit with the calculated column.

Add a calculated column to the table that returns the city name if the city is in the top 10, otherwise the calculated column will return "Not in Top 10". In the visual, replace Sales Profit with the calculated column.



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.

Answer Area

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

cross-filter
cross-highlight
not affect

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

cross-filter
cross-highlight
not affect

(Perform Advanced Analytics)

Check the answer and show the description

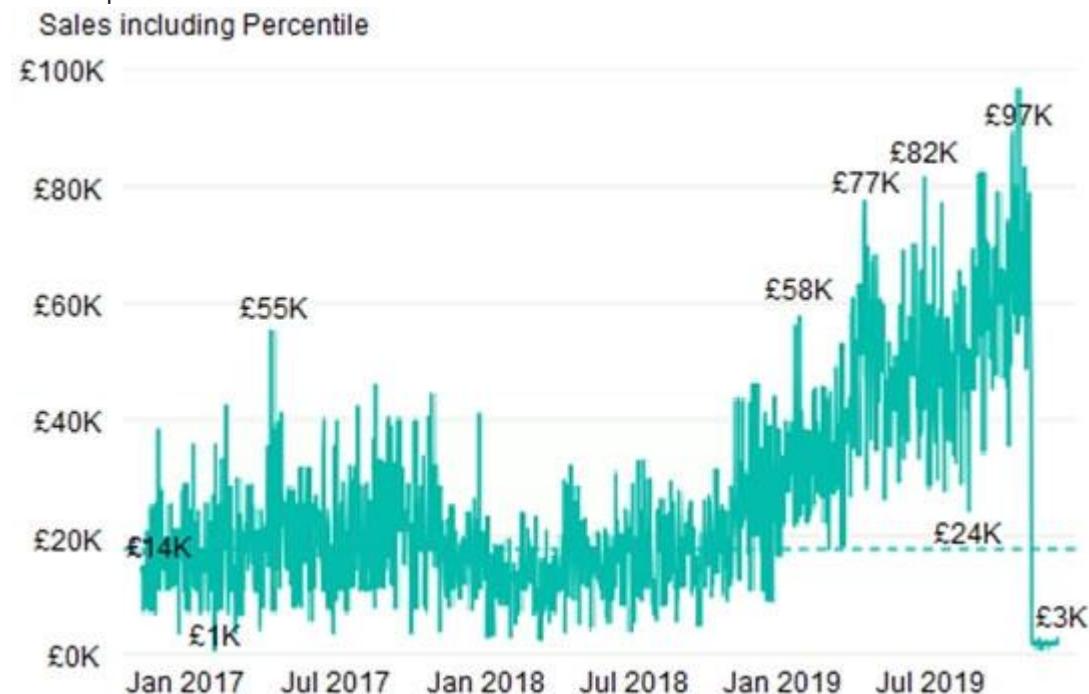
Box 1: not affect

Box 2: cross-filter



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

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



Add a measure to the visual that uses the following DAX expression. Measure1 = PERCENTILEX.INC (Sales,Sales[Total Sales],0.40)

Add a new percentile line that uses Total Sales as the measure and 40% as the percentile.

Create a horizontal line that has a fixed value of 24,000.

Add a measure to the visual that uses the following DAX expression. Measure1 = PERCENTILEX.EXC (Sales,Sales[Total Sales],0.40)

Check the answer and show the description

Answer is **Add a new percentile line that uses Total Sales as the measure and 40% as the percentile.**

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

Example:

1. Click on the analytics tab
2. Select Percentile



3. You can choose a specific percentile along with other formatting options.
4. Drag a date or non-numeric dimension into the Axis of a column chart
Add percentile lines to monitor daily revenue

Incorrect Answers:

A, D: There are two main percentile functions in Power BI:

PERCENTILE.EXC(column, kth percentile)

PERCENTILE.INC(column, kth percentile)

The first parameter is the column which you want the percentile value for.

The second parameter is the kth percentile where k percentage of values will fall below.

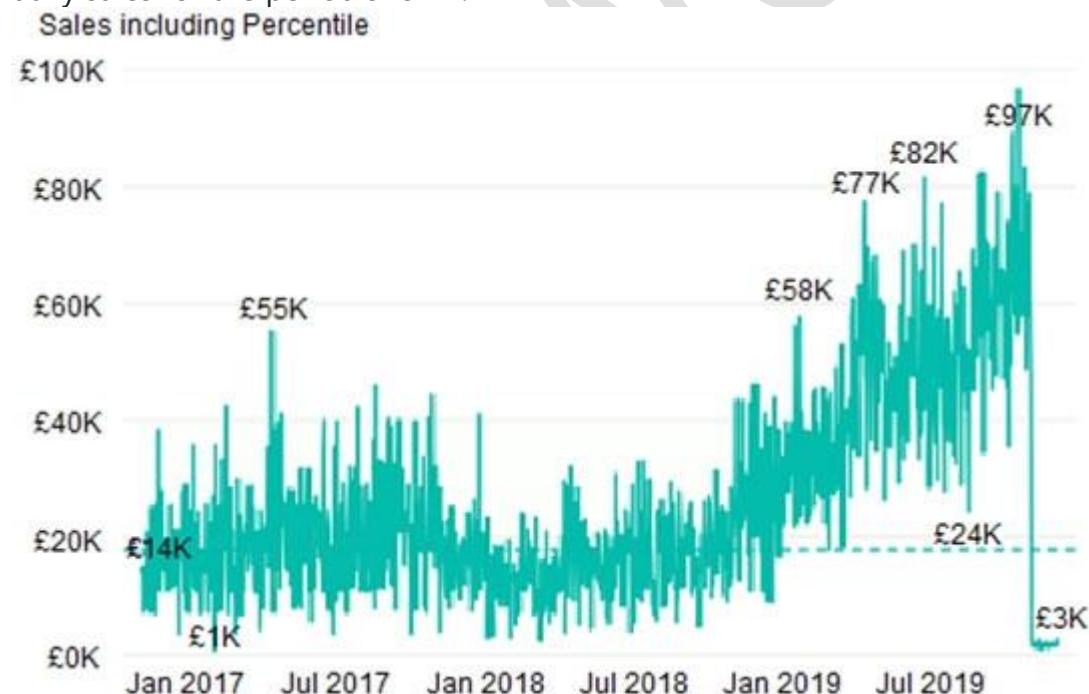
Both formulas use a slightly different algorithm. The second algorithm works for any value of k between 0 and 1 (the 0th and 100th percentile). In the EXC version the data excludes both lower and upper bounds, while INC includes them.

Reference:

<https://dash-intel.com/powerbi/statistical-functions-percentile.php>

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

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



(Perform Advanced Analytics)

Add a measure to the visual that uses the following DAX expression. Measure1 = PERCENTILEX.INC (Sales,Sales[Total Sales],0.40)

Add a new percentile line that uses Total Sales as the measure and 40% as the percentile.



Create a horizontal line that has a fixed value of 24,000.

Add a measure to the visual that uses the following DAX expression. Measure1 = PERCENTILEX.EXC (Sales,Sales[Total Sales],0.40)

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

MonthName	Total Sales	Sales Last Year	% Growth to Last Year
January	£559,263.79	£144,365.51	74.19%
February	£583,915.29	£215,923.28	63.02%
March	£684,091.92	£211,347.46	69.11%
April	£957,686.49	£350,270.97	63.43%
May	£841,473.26	£310,708.65	63.08%
June	£876,911.71	£298,356.83	65.98%
July	£922,410.09	£348,435.28	62.23%
August	£1,002,219.24	£388,213.68	61.26%
September	£1,152,976.22	£407,595.76	64.65%
October	£1,262,647.67	£465,583.06	63.13%
November	£555,548.44	£555,548.44	0.00%
December	£553,615.45	£553,615.45	0.00%
Total	£9,952,759.56	£4,249,964.36	57.30%

The indicator color for Total Sales will be based on % Growth to Last Year.

The solution must use the existing calculations only.

How should you configure the visual?



Answer Area

Conditional formatting:



(Perform Advanced Analytics)

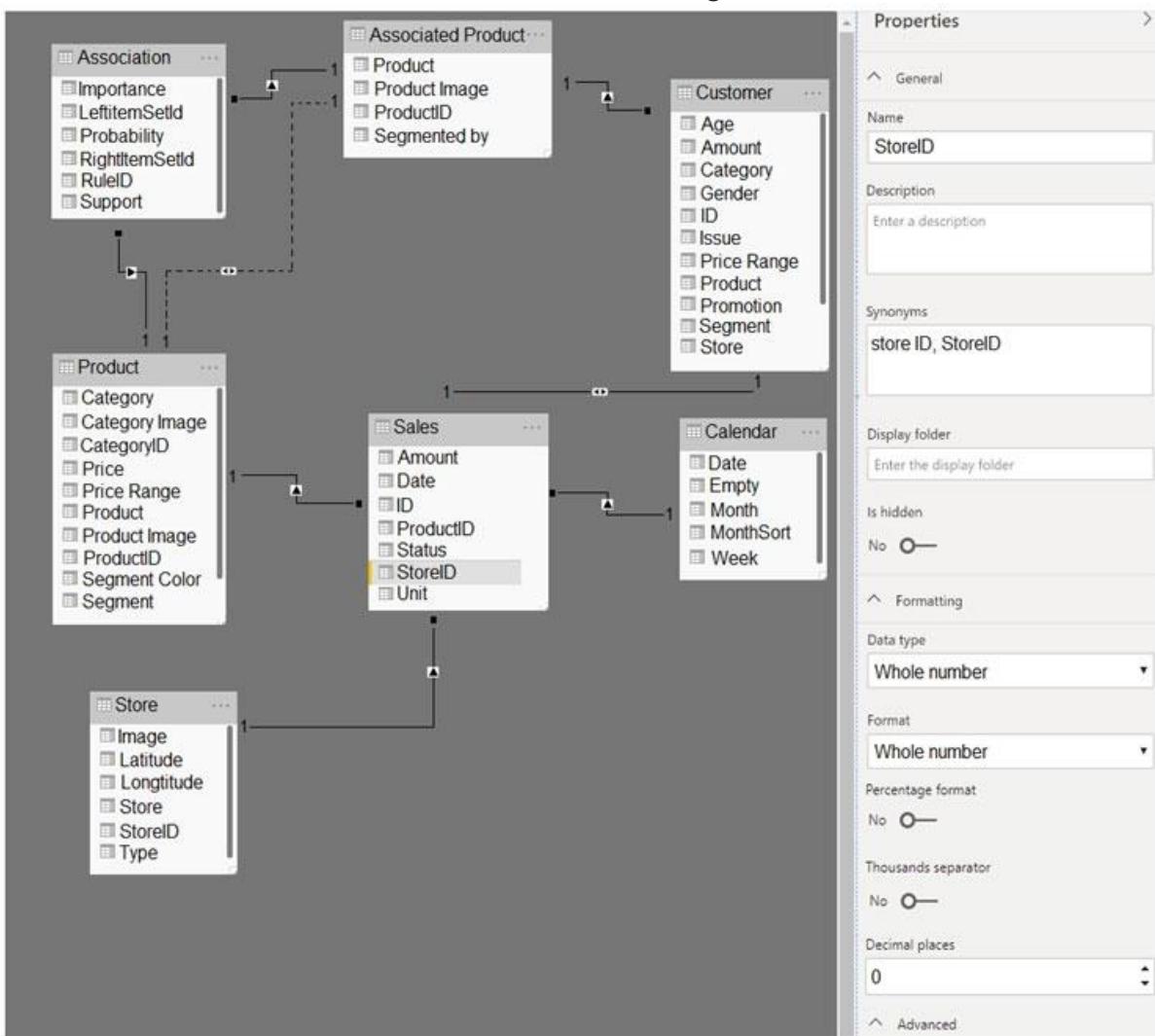
Check the answer and show the description

Box 1: Background color To format the Color column based on its field values, select Conditional formatting for the Color field, and then select Background color or Font color. In the Background color or Font color dialog box, select Field value from the Format by drop-down field.

Box 2: Rules



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



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



Answer Area

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

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

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

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

(Perform Advanced Analytics)

Check the answer and show the description

Answer is **D and D**

You use Power BI Desktop to create a visualization for a Microsoft SQL Server data source.

You need to ensure that you can use R visualization.

Which two actions should you perform?

(Perform Advanced Analytics)

Download and install Microsoft R Server.

Download and install RStudio Server on the computer that has Power BI Desktop installed.

Install SQL Server R Services on the server that runs SQL Server.

Enable R Scripting on the computer that has Power BI Desktop installed.

Download and install Microsoft R on the computer that has Power BI Desktop installed.

How does the admin workspace role differ from other types of workspace roles?

(Create and Manage Workspaces)

Admin is the only role that can publish or update apps.

Admins are the only role that can remove users.

Admin is the only role that can create, edit, or delete content in a workspace.

Admin is the only role that can publish content to a workspace.



What is the best description of a workspace?

(Create and Manage Workspaces)

A workspace is a feature in Power BI service that allows you to view reports only.

A workspace is a feature that allows you to view and edit the data model, build visualizations, and transform the data.

A workspace is a feature of Power BI Desktop that allows you to build reports only.

A workspace is a centralized location or repository that allows you to collaborate with colleagues and teams to create collections of reports, dashboards, etc.

What feature in Power BI service can you use to troubleshoot the flow of data from its source to destination?

(Create and Manage Workspaces)

Usage metrics report

Query caching

Quick insights

Lineage view

A key tenant of data protection is sensitivity labels, which specifies what?

(Create and Manage Workspaces)

The classification of critical content in Power BI

Access to content in the Power BI service

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?

(Create and Manage Workspaces)

comments

tiles

Microsoft Information Protection sensitivity labels

Active Directory groups



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

(Create and Manage Workspaces)

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.

Create one workspace for development. From the new workspace, publish an app for production.

Create a workspace for development and a workspace for production. From the production workspace, publish an app.

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.

You have a collection of reports for the HR department of your company. The datasets use row-level security (RLS). The company has multiple sales regions that each has an HR manager.

You need to ensure that the HR managers can interact with the data from their region only. The HR managers must be prevented from changing the layout of the reports.

How should you provision access to the reports for the HR managers?

(Create and Manage Workspaces)

Publish the reports to a different workspace other than the one hosting the datasets.

Publish the reports in an app and grant the HR managers access permission.

Add the HR managers as members of the existing workspace that hosts the reports and the datasets.

Create a new workspace, copy the datasets and reports, and add the HR managers as members of the workspace.

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?

(Create and Manage Workspaces)

Viewer

Contributor

Member

Admin

Which of the following is NOT a benefit of Azure Active Directory security groups?

(Create and Manage Workspaces)

Manage member and computer access to shared resources

Create specific security policies for different groups

Set permissions for one member at a time

Manage user access when people leave and join teams

What is the best sharing option for organizations?

(Create and Manage Workspaces)

Reports

Dashboards

Apps

Spreadsheets

Which of the following is the highest level of permissions when sharing workspaces?

(Create and Manage Workspaces)

Admin

Member

Contributor

Viewer

You plan to embed multiple visualizations in a public website.

Your Power BI infrastructure contains the visualizations configured as shown in the following table.



Visualizations name	Characteristic
Visual 1	Uses row-level security (RLS)
Visual 2	Uses a dataset that is stored in Microsoft OneDrive for Business
Visual 3	Contained in a report that was shared to your user account
Visual 4	Is a custom visual
Visual 5	Uses a dataset from an on-premises Microsoft SQL Server Analysis Services (SSAS) database

Which two visualizations can you embed into the website? Each correct answer presents a complete solution.

(Create and Manage Workspaces)

Visual 1

Visual 2

Visual 3

Visual 4

Visual 5

You have an app workspace named Retail Store Analysis in the Power BI service.

You need to manage the members that have access to the app workspace using the least amount of administrative effort.

What should you do?

(Create and Manage Workspaces)

From the Office 365 Admin center, click Users.

From the Power BI Admin portal, click Tenant settings.

From the Power BI Admin portal, click Usage metrics.

From the Office 365 Admin center, click Groups.

Check the answer and show the description

Answer is **From the Office 365 Admin center, click Groups.**

References:



<https://docs.microsoft.com/en-us/power-bi/service-manage-app-workspace-in-power-bi-and-office-365>

Question 235

Your organization has a Microsoft Office 365 subscription.

When the users attempt to access the Power BI Service, they receive the error message shown in the exhibit.

Microsoft Power BI

Sorry...

We can't finish signing you up.

Your IT department has turned off signup for Microsoft Power BI. Contact them to complete signup.

[Learn about other ways to get Office](#)

You need to ensure that all the users can access the Power BI service.

What should you do first?

(Create and Manage Workspaces)

From the properties of each dashboard, modify the Share dashboard settings.

From Microsoft Azure PowerShell, run the Set-MsolDomain cmdlet.

Instruct each user to install Microsoft Office 2016.

From Microsoft Azure PowerShell, run the Set-MsolCompanySettings cmdlet.

From Power BI Admin portal, modify the Tenant settings.

F. From the Microsoft Azure Active Directory admin center, assign a Power BI (free) license to each user.

G. From the Power BI Admin portal, modify the Privacy Settings.

You have a Microsoft SharePoint Online site named Sales.

Your company has 1,000 sales users. All the sales users can access Sales.

You create a report in an app workspace in the Power BI service. You embed the report into a page on the Sales site by using the Power BI web part.



You need to ensure that all the sales users can view the report from the Sales site.

What should you do?

(Create and Manage Workspaces)

Configure the Portal Site Connection for the Sales site.

Enable anonymous access for the Sales site.

Configure the app workspace for Premium capacity.

Disable the Embed content in apps setting from the Tenant settings in Power BI.

Your company plans to use Power BI for 20 users in the sales department. The users will perform the following tasks:

- Access a published Power BI app.
- Modify reports in an app workspace.
- Share dashboards created in My Workspace.

You need to identify which Power BI licenses are required for the tasks. The solution must use the Power BI (free) license, whenever possible.

Which license should you identify for each task?

Answer Area

Access a published Power BI app:

	▼
Power BI (free)	
Power BI PRO	

Modify reports in an app workspace:

	▼
Power BI (free)	
Power BI PRO	

Share dashboards created in My Workspace:

	▼
Power BI (free)	
Power BI PRO	

(Create and Manage Workspaces)



You plan to deploy a Power BI app workspace that will be viewed by 10,000 users. You need to ensure that dashboard data can be updated every 30 minutes.

What should you do?

(Create and Manage Workspaces)

Assign each user a Power BI Pro license.

Store the dataset in Microsoft Azure Storage that uses the Premium storage tier.

Create the app workspace by using an account that is assigned a Power BI Pro license.

Configure the app workspace for Premium capacity.

Check the answer and show the description

Answer is **Configure the app workspace for Premium capacity.**

With pro you can only refresh data 8 time a day while with premium its 48 time which is every 30 minutes

Reference:

<https://docs.microsoft.com/en-gb/power-bi/service-premium-what-is>

You create an app workspace named Wingtip Sales. Wingtip Sales is configured as shown in the following exhibit.



Create an app workspace

Name your workspace

Wingtip Sales

Workspace ID

wingtipsales

Available

Private - Only approved members can see what's inside

Members can edit Power BI content

Add workspace members

Enter email addresses

Add

austin@wingtiptoys.com

Admin



maxwel@wingriptoys.com

Member



james@wingtiptoys.com

Member



Advanced

Dedicated capacity

Off

Save

Cancel



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

Answer Area

The one task that Austin is permitted to perform, but the other members are not permitted to perform, is [answer choice].

add other users as members
create a new dashboard
pin a report visualization to a dashboard
publish a PBIX file

To make the content in Wingtip Sales available to users who have the free Power BI license, you must first [answer choice].

add all the users as workspace members
change the app workspace from Private to Public
purchase Power BI Premium

(Create and Manage Workspaces)

Check the answer and show the description

Answers are;

Add other users as members

Purchase Power BI Premium

You open the Power BI Admin portal as shown in the following graphic.

The screenshot shows the Power BI Admin portal interface. The left sidebar includes links for Favorites, Recent, Apps, Shared with me, Workspaces, and My Workspace. The main content area is titled 'Admin portal' and shows 'Capacity settings' under 'Power BI Embedded'. It lists a single capacity named 'customers' with 'Pat T' as the capacity admin, SKU A1, and status Active. A link 'Set up new capacity in Azure' is also visible.

CAPACITY NAME	CAPACITY ADMINS	ACTIONS	SKU	STATUS
customers	Pat T		A1	Active

All the app workspaces use the customer's capacity.

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



Answer Area

You can scale up the customers capacity by changing the [answer choice].

pricing tier from the Azure portal
settings of the workspace
subscription from the Office 365 admin center
Tenant settings from the Power BI Admin portal

When designing a custom application that embeds reports from the customers capacity, the developer [answer choice].

can use both the user owns data model and the app owns data model
must use the app owns data model
must use the user owns data model

(Create and Manage Workspaces)

Check the answer and show the description

Answers are;

- 1) pricing tier from the Azure portal**
- 2) must use the app owns data model**

There are 2 options of embedding.

First is internal, via Sharepoint, Teams, Dynamic.. and for this you need Power BI Premium and users need to be logged in (user owns data).

Second is external, embedding it in custom applications and here users are not required to login or even to have Power BI license. So in this case, app owns data model. On image (Power BI Embedded) option is selected.

Reference:

<https://docs.microsoft.com/en-us/power-bi/developer/embedded/embedding>

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Create an app workspace

Name your workspace

Wingtip Sales

Workspace ID

wingtipsales

Available

Private - Only approved members can see what's inside

Members can edit Power BI content

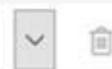
Add workspace members

Enter email addresses

Add

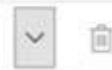
austin@wingtiptoys.com

Admin



maxwel@wingriptoys.com

Member



james@wingtiptoys.com

Member



Advanced

Dedicated capacity

Off

Save

Cancel



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

Answer Area

The one task that Austin is permitted to perform, but the other members are not permitted to perform, is [answer choice].

add other users as members
create a new dashboard
pin a report visualization to a dashboard
publish a PBIX file

To make the content in Wingtip Sales available to users who have the free Power BI license, you must first [answer choice].

add all the users as workspace members
change the app workspace from Private to Public
purchase Power BI Premium

(Create and Manage Workspaces)

Check the answer and show the description

Answers are;

Add other users as members

Purchase Power BI Premium

Free users can't access other app workspaces but only if the workspace is backed up by a premium license.

You create an app workspace named Wingtip Sales. Wingtip Sales is configured as shown in the following exhibit.



Create an app workspace

Name your workspace

Wingtip Sales

Workspace ID

wingtipsales

Available

Private - Only approved members can see what's inside

Members can edit Power BI content

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Enter email addresses

Add

austin@wingtiptoys.com

Admin



maxwel@wingriptoys.com

Member



james@wingtiptoys.com

Member



Advanced

Dedicated capacity

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Save

Cancel



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

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purchase Power BI Premium

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Check the answer and show the description

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Free users can't access other app workspaces but only if the workspace is backed up by a premium license.

You open the Power BI Admin portal as shown in the following graphic.

CAPACITY NAME	CAPACITY ADMINS	ACTIONS	SKU	STATUS
customers	Pat T		A1	Active

All the app workspaces use the customer's capacity.

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



Answer Area

You can scale up the customers capacity by changing the [answer choice].

pricing tier from the Azure portal
settings of the workspace
subscription from the Office 365 admin center
Tenant settings from the Power BI Admin portal

When designing a custom application that embeds reports from the customers capacity, the developer [answer choice].

can use both the user owns data model and the app owns data model
must use the app owns data model
must use the user owns data model

(Create and Manage Workspaces)

Check the answer and show the description

Answers are;

- 1) pricing tier from the Azure portal**
- 2) must use the app owns data model**

You have a Power BI app named App1. The privacy for the App1 app workspace is set to Private.

A user named User1 reports that App1 does not appear in the My organization AppSource. App1 appears in the My organization AppSource for your account. You need to ensure that User1 sees App1 from the My organization AppSource.

What should you do?

(Create and Manage Workspaces)

From the app workspace, click Update app, configure the Access setting, and then click Update app.

From the app workspace, share the dashboard.

From the app workspace settings, add a member.

From the app workspace, click Update app, configure the Content settings, and then click Update app.

In the Power BI service, you create an app workspace that contains several dashboards. You need to provide a user named user1@contoso.com with the ability to edit and publish dashboards.



What should you do?
(Create and Manage Workspaces)

Modify the members of the app workspace.

Configure security for the dataset used by the app.

Share the dashboard, and then modify the Access settings of the dashboard.

From the app workspace, click Update app, and then configure the Access settings.

Check the answer and show the description

Answer is **Modify the members of the app workspace.**

Sharing dashboard will no give a user the ability to edit the contains but If you modify his permission to be a Member then he can Create, edit, and delete content in the workspace and Share an item or share an app.

Way 1. Go to app workspace, click the "Access", add a Member/Contributor.

Way 2. "Update App" -> "Permission" -> specific individual or group -> "check" Allow all users to connect to the apps underlying datasets using the build permission.

Way 3. Share a particular Dashboard/Report to someone -> under Tab "Share", input email and note, "check" Allow all users to build new contents using underlying datasets.

Way 4. Go to a particular Type of datasets, click the ellipsis, select "Manage permissions" and then edit the Build Permission (Add or Remove).

References:

<https://docs.microsoft.com/en-us/power-bi/service-manage-app-workspace-in-power-bi-and-office-365>

<https://community.powerbi.com/t5/Service/Workspace-Edit-versus-view-permission/td-p/185450>

You embed a Power BI report in a Microsoft SharePoint Online page.

A user named User1 can access the SharePoint Online page, but the Power BI web part displays the following error message: "This content isn't available."

User1 is unable to view the report.

You verify that you can access the SharePoint Online page and that the Power BI report displays as expected.



You need to ensure that User1 can view the report from SharePoint Online.

What should you do?

(Create and Manage Workspaces)

Publish the app workspace.

Share the dashboard in the app workspace.

Edit the settings of the Power BI web part.

Modify the members of the app workspace.

Check the answer and show the description

Answer is **Modify the members of the app workspace.**

Users or groups need access to both the SharePoint Online page and the report in the Power BI app to see the report on the SharePoint page.

Your company has a custom line-of-business application named SalesApp.

The developers of SalesApp want to push data into the Power BI service to create several visualizations.

You need to ensure that the developers can push the data from SalesApp to the Power BI service.

What should you do?

(Create and Manage Workspaces)

Go to portal.azure.com and create a web app.

Go to dev.powerbi.com/apps and register an application.

Go to app.powerbi.com/admin-portal and click Publish to web.

Go to app.powerbi.com and create an app workspace.

Check the answer and show the description

Answer is **Go to dev.powerbi.com/apps and register an application.**



References:

<https://docs.microsoft.com/en-us/power-bi/developer/walkthrough-push-data-register-app-with-azure-ad>

What type of parameter provides a look at how different scenarios might play out?
(Manage Datasets in Power BI)

What-if

If-then

What benefit does dynamic reports provide to end users?

(Manage Datasets in Power BI)

It provides static views of data that can only be manipulated by report developers.

It gives end users more control over the data that is displayed.

Where are the dataset-scheduled refreshes configured?

(Manage Datasets in Power BI)

Power BI Desktop

Power BI Service

AppSource

What reserved parameters configure the start and end of where incremental refresh should occur?

(Manage Datasets in Power BI)

RangeStart and RangeEnd

Start and End parameters

StartRange and EndRange

What is the difference between Promotion and Certification when endorsing a dataset?

(Manage Datasets in Power BI)

Promotion is for broad usage while Certification needs permission granted on the Admin Tenant settings.



Promotion does not need specific permissions while Certification requires permission from the dataset owner to access the dataset.

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?

(*Manage Datasets in Power BI*)

Show whitespace

Column profile

Column distribution

Column quality

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

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

Which three actions should you perform in sequence?

Actions**Answer Area**

Expand the columns.



Expand the records.



Add columns that use data type conversions.

Set the data types.

Convert the list to a table.

(*Manage Datasets in Power BI*)

Check the answer and show the description

**Actions**

Expand the columns.

Expand the records.

Add columns that use data type conversions.

Set the data types.

Convert the list to a table.

Answer Area

Convert the list to a table.

Expand the columns.

Set the data types.

**Reference:**

<https://www.mssqltips.com/sqlservertip/4621/using-power-bi-with-json-data-sources-and-files/>

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?

(Manage Datasets in Power BI)

Create a new aggregation that summarizes by employee.

Create a new group on the state column and set the Group type to List.

Create a new group on the state column and set the Group type to Bin.

Create a new aggregation that summarizes by state.

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

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

Which DAX functions should you use?



Answer Area

```
Sales PYTD =  
  
VAR startyear =  
    STARTOFTYEAR ( PREVIOUSYEAR ( 'Date' [Date] ) )  
  
VAR enddate =  
    LASTDATE ( Sales[Date] ) - 365  
  
RETURN  
  
    ( Sales[Sales] ),  
    CALCULATE (,  
        DATESBETWEEN (,  
            SAMEPERIODLASTYEAR (,  
                SLIM (,  
  
        ( 'Calendar' [Date], startyear, enddate )  
        CALCULATE  
        DATESBETWEEN  
        SAMEPERIODLASTYEAR  
        SLIM  
    )  
(Manage Datasets in Power BI)
```

Check the answer and show the description

Answer is **CALCULATE - DATESBETWEEN**

Reference:

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

You have a Power BI tenant.

You have reports that use financial datasets and are exported as PDF files.

You need to ensure that the reports are encrypted.

What should you implement?

(Manage Datasets in Power BI)

dataset certifications

row-level security (RLS)



sensitivity labels

Microsoft Intune policies

You create a report by using Microsoft Power BI Desktop.

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

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

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

(*Manage Datasets in Power BI*)

a subscription

a scheduled refresh of the dataset

an OData feed

an On-premises data gateway

Check the answer and show the description

Answer is **an On-premises data gateway**

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

Reference:

<https://powerbi.microsoft.com/en-us/gateway/>

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

You have admin access to the workspace and permission to use an existing On-premises data gateway for which the Oracle data source is already configured.

You need to ensure that the data is updated every morning. The solution must minimize configuration effort.



Which two actions should you perform when you configure scheduled refresh?

(*Manage Datasets in Power BI*)

Configure the dataset to use the existing On-premises data gateway.

Deploy an On-premises data gateway in personal mode.

Set the refresh frequency to Daily.

Configure the dataset to use the personal gateway.

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

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

You discover that the dataset refresh fails after the refresh runs out of resources.

What is a possible cause of the issue?

(*Manage Datasets in Power BI*)

Query folding is not occurring.

You selected Only refresh complete periods.

The data type of the column used to partition the data changed.

A filter is missing on the report.

Which of the following options allows you to keep reports up to date by automatically refreshing datasets based on a frequency & time of day?

(*Manage Datasets in Power BI*)

Incremental refresh

Scheduled refresh

Data gateway

Row level security

What is the main difference between a static role and a bookmark?

(*Manage Datasets in Power BI*)

Bookmarks filter data out of the model and limit what the audience can access

Roles filter data out of the model and limit what the audience can access

Bookmarks are only available in Power BI Service

Roles are pre-filtered views of a report



Is it possible for a user to be a part of two RLS roles?

(Manage Datasets in Power BI)

Yes, the roles will be combined for the user

Yes, but roles will need to access one at a time

Yes, this is known as dynamic row level security

No

Which of the following is a benefit of incremental refresh?

(Manage Datasets in Power BI)

Faster refresh times

More reliable

Reduced resource usage

All of the above

If you wanted to implement incremental refresh for your company data, which of the following data sources must be avoided as it doesn't support query folding?

(Manage Datasets in Power BI)

Relational Databases

Flat files

SharePoint Lists

Azure Active Directory

You have a Microsoft Excel workbook that contains two tables.

From Power BI, you create a dashboard that displays data from the tables.

You update the tables each day.

You need to ensure that the visualizations in the dashboard are updated daily.

Which three actions should you perform in sequence?

Actions

Answer Area

Download and install an on-premises data gateway (personal).



Configure the Gateway Connection settings for the dataset.

Add subscriptions for the reports.



Download and install Power BI Desktop.



Configure the Schedule Refresh settings for the dataset.



(Manage Datasets in Power BI)

Check the answer and show the description

- Dashboards you can just create in Power BI Services (Online)
- This means Power BI Desktop was already installed as well as report subscriptions were already made

Based on that assumptions, correct answer is;

1. Download and install an on-premises data gateway (Personal Mode), as this is the only gateway you can choose based on the task given option
2. Configure the Gateway Connections settings for the dataset
3. Configure the Schedule Refresh settings for the dataset

You have a Power BI dashboard that displays different visualizations of company sales.

You enable Q&A on the dashboard.

You need to provide users with sample questions that they can ask when using Q&A.

Which settings should you modify from the Power BI Settings?

(Manage Datasets in Power BI)

Subscriptions

Workbooks

Dashboards

Datasets

Check the answer and show the description

Answer is **Datasets**

You modify the dataset to allow featured questions to show as suggested Q&As.

References:

<https://docs.microsoft.com/en-us/power-bi/service-q-and-a-create-featured-questions>

A data analyst publishes several Power BI visualizations to a blog.

You discover that some of the visualizations contain data that is considered private by your company.



You need to prevent the visualizations from being published to the blog.

What should you do?

(*Manage Datasets in Power BI*)

From the Power BI Admin portal, disable the Publish to web setting.

From the Power BI settings, delete the embedded codes.

From the Power BI Admin portal, disable the Share content with external users setting.

From the dashboard settings, modify the Share dashboard settings.



Check the answer and show the description

Answer is **From the Power BI settings, delete the embedded codes.**

Once you create a Publish to web embed code, you can manage your codes from the Settings menu in Power BI. Managing embed codes includes the ability to remove the destination visual or report for a code (rendering the embed code unusable), or getting the embed code.

References:

<https://docs.microsoft.com/en-us/power-bi/service-publish-to-web>

You have an app workspace that contains two datasets named dataset1 and dataset2. Dataset1 connects to a Microsoft Azure SQL database. Dataset2 connects to a Microsoft Excel file stored in Microsoft OneDrive for Business.

You create a report named Report1 that uses dataset1.

You pin Report1 to a dashboard named Dashboard1.

You publish the app workspace to all the users in your organization.

You need to delete dataset2 from the app workspace.

What should you do first?

(*Manage Datasets in Power BI*)

Delete Dashboard1.

Delete Report1.

Unpublish the app.

Configure the refresh settings for Dataset2.



Which function will tell you the logged on username in the Power BI Service?

(*Row-level Security*)

LOOKUPVALUE()

USERPRINCIPALNAME()

USEROBJECTID()

Where can you test RLS by using different security roles?

(*Row-level Security*)

Power BI Desktop only

Power BI Service only

Both Power BI Desktop and Power BI Service

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

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

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

A sales manager changes to a different region.

You need to ensure that the sales manager can see the correct sales data.

What should you do?

(*Row-level Security*)

Change the Microsoft Power BI license type of the sales manager.

From Microsoft Power BI Desktop, edit the Row-Level Security setting for the reports.

Request that the sales manager be added to the correct Azure Active Directory group.

Manage the permissions of the underlying dataset.

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?

(Row-level Security)

The user will see data for which the State Province value is Kentucky and the Calendar Year is 2020.

The user will see data for which the State Province value is Kentucky or the Calendar Year is 2020.

The user will see only data for which the State Province value is Kentucky.

The user will receive an error and will not be able to see the data in the report.

Which of the following functions allows you to define filtered views for a specific list of users?

(Row-level Security)

USER

USERPRINCIPALNAME

ROLE

USERRELATIONSHIP

RLS rules can be applied to users with which permission level?

(Row-level Security)

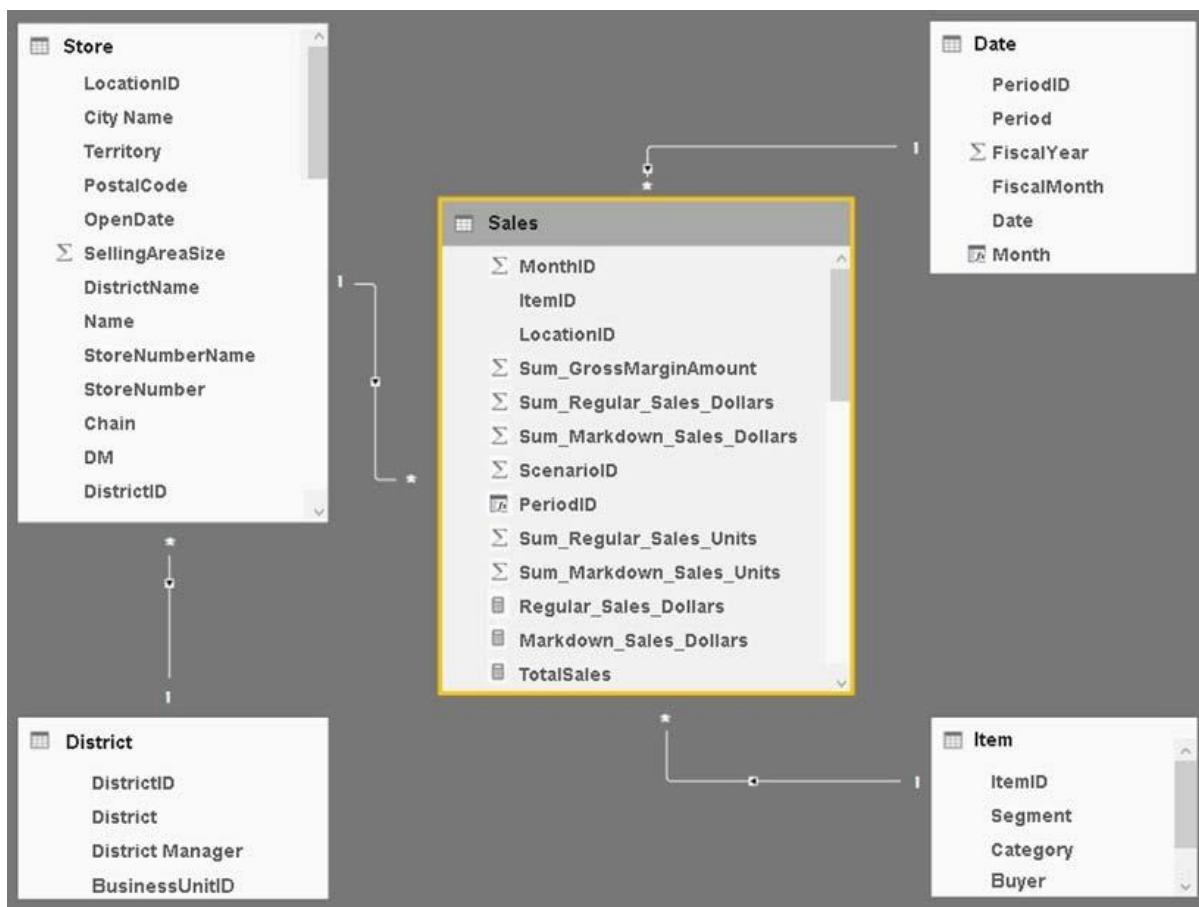
Admin

Member

Contributor

Viewer

You plan to create a Power BI report. You have the schema model shown in the exhibit.



The model has the following relationships:

- Store to District based on DistrictID
- Sales to Store based on LocationID
- Sales to Date based on PeriodID
- Sales to Item based on ItemID

You configure row-level security (RLS) so that the district managers of the stores only see the sales from the stores they manage.

When the district managers view the Store by Items report, they see items for all the stores.

You need to ensure that the district managers can see items for the stores they manage only.

How should you configure the relationship from Sales to Item?

(*Row-level Security*)

Select Assume Referential Integrity.

Change the Cardinality to One to Many (1:*)�

Change the Cross filter direction to Both.

Change the Cardinality to One to one (1:1).



You are modeling data in a 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?

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

(Drag & Drop)



Check the answer and show the description

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

You are modeling data by using Microsoft Power BI. Part of the data model is a large Microsoft SQL Server table named Order that has more than 100 million records. During the development process, you need to import a sample of the data from the Order table. Solution: You add a report-level filter that filters based on the order date. Does this meet the goal?

(Drag & Drop)

Yes



No

You are preparing a financial report in Power BI.

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

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

You need to prepare the data to support the following:

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

Which four actions should you perform in sequence?

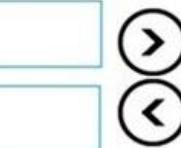
Actions

Answer Area

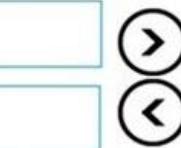
Rename the Attribute column as Year



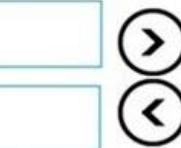
Rename the Measure column as Year



Use the first row as headers



Use headers as the first row



Unpivot all the columns other than Measure

Transpose the table

Change the data type of the Year column to Date

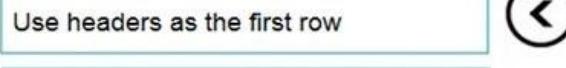
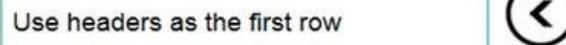
(Drag & Drop)

Check the answer and show the description

**Actions**

Rename the Attribute column as Year

Use the first row as headers



Use headers as the first row

Answer Area

Transpose the table

Unpivot all the columns other than Measure

Rename the Measure column as Year



Change the data type of the Year column to Date

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

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

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

How should you complete the calculation?

**Values**

ALL
ALLSELECTED
CALCULATE
CALCULATETABLE
CURRENTGROUP
DIVIDE
SUMMARIZE
TOPN

Answer Area

Product Category % of Total 2 =
 [] ([Total Sales],
 [] ([Total Sales],
 [] ()
 Product[ProductName])))

(Drag & Drop)



Check the answer and show the description

Values

ALL
ALLSELECTED
CALCULATE
CALCULATETABLE
CURRENTGROUP
DIVIDE
SUMMARIZE
TOPN

Answer Area

Product Category % of Total 2 =
 DIVIDE [] ([Total Sales],
 CALCULATE [] ([Total Sales],
 ALLSELECTED [] ()
 Product[ProductName])))



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?

Actions**Answer Area**

Pin items from the reports to the dashboard.

Rearrange, resize, or remove items from the phone view.

Change the dashboard view to **Phone view**.

Open the dashboard.

Create a phone layout for the existing reports.



(Drag & Drop)

Check the answer and show the description

Actions**Answer Area**

Pin items from the reports to the dashboard.

Open the dashboard.

Rearrange, resize, or remove items from the phone view.

Change the dashboard view to **Phone view**.

Change the dashboard view to **Phone view**.



Pin items from the reports to the dashboard.

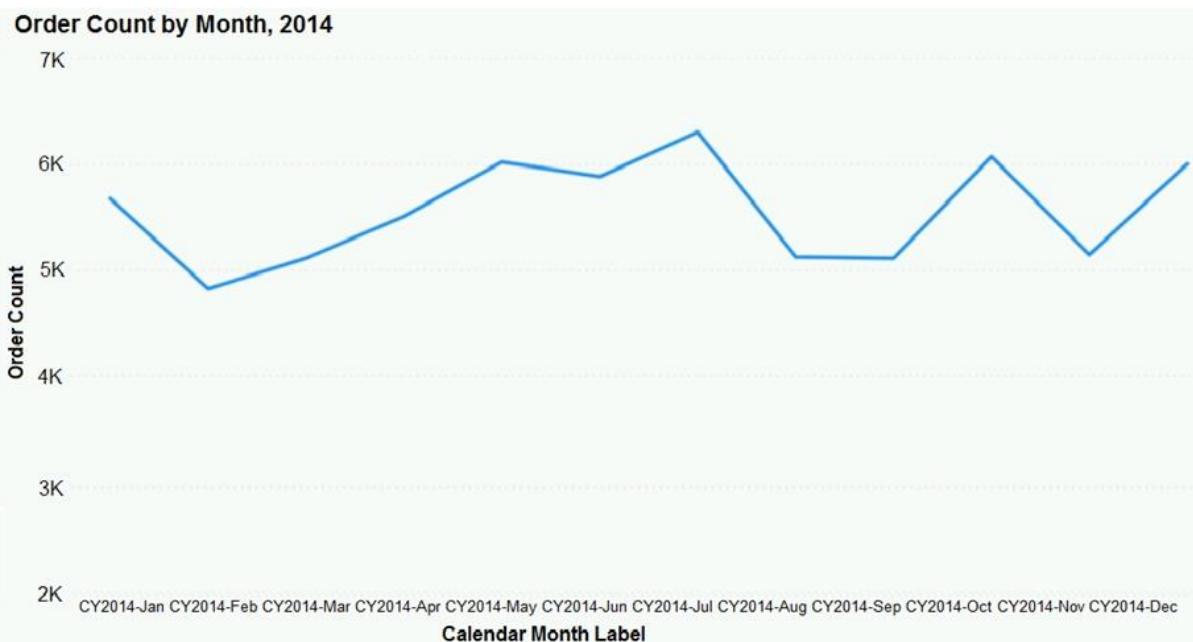
Open the dashboard.

Rearrange, resize, or remove items from the phone view.

Create a phone layout for the existing reports.



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 in sequence?

Actions**Answer Area**

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

From the Analytics pane, add a Median line.

Select the line chart.

From the Analytics pane, add an Average line.

Turn on data labels for the new line.



(*Drag & Drop*)

Check the answer and show the description

Answer is

- 1. Select the line chart**
- 2. From the Analytics pane, Add the average line**
- 3. Turn on Data Label for the new line.**



You have a query named Customer that imports CSV files from a data lake. The query contains 50,000 rows as shown in the exhibit.

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

Each file contains deltas of any new or modified rows from each load to the data lake.

Multiple files can have the same customer ID.

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

Which three actions should you perform in sequence?

Actions

Answer Area

Filter the Customer query on Modified Date is Latest.

Merge the CustomerGrouped query into the Customer query based on Customer ID and Modified Date by using a left outer join.

Remove duplicates in the Customer ID column.



Duplicate the Customer query and name the new query CustomerGrouped.

Group the CustomerGrouped query by Customer ID and output the max Modified Date value into a column named Modified Date.

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



(Drag & Drop)

Check the answer and show the description

Answer is;

- 1. Duplicate the Customer query**
- 2. Group the CustomerGrouped query to find the max modified date**
- 3. Merge the two queries on inner join**

You have a Microsoft Power BI workspace.

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

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

The solution must use the principle of least privilege.

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

Select and Place:

Roles	Answer Area
<input style="border: 1px solid #ccc; padding: 2px 10px; margin-right: 10px;" type="button" value="Admin"/> <input style="border: 1px solid #ccc; padding: 2px 10px;" type="button" value="Contributor"/>	User1: <input style="border: 1px solid #ccc; width: 100px; height: 25px;" type="text"/>
<input style="border: 1px solid #ccc; padding: 2px 10px; margin-right: 10px;" type="button" value="Member"/> <input style="border: 1px solid #ccc; padding: 2px 10px;" type="button" value="Viewer"/>	User2: <input style="border: 1px solid #ccc; width: 100px; height: 25px;" type="text"/>

(Drag & Drop)

Check the answer and show the description

Box 1: Member

Box 2: Contributor

From Power BI service, you publish an app that contains one dashboard and one report.

Q&A is enabled on the dashboard.

In Q&A, a user types the query count of clients and fails to receive any results. The user then types the query count of subscribers and receives the expected results.

You need to ensure that the user can use both queries to receive the same results.

Which four actions should you perform in sequence?

**Actions****Answer Area**

Edit the dashboard settings from powerbi.com.



Enable and configure Data classification for dashboards.

Publish the report to App Workspaces.



Update the app from powerbi.com.



Edit the synonyms.

Open the report by using Power BI Desktop.

Delete and publish the app.

(Drag & Drop)

Check the answer and show the descriptionAnswer is **6-5-3-4**

You plan to create a report in Power BI Desktop.

You have the following tables.

Table name	Column name
Sales	OrderID
	Product
	ProductCategory
	ProductSubCategory
	OrderDate
	SalesAmount
Date	DateID
	Date
	Year
	Month
	Week
	Day

You have a measure that uses the following DAX formula.

Total Sales = SUM('Sales'[SalesAmount])

You plan to create a report to display TotalSales by ProductCategory and



ProductSubCategory.

You need to create a measure to calculate the percentage of TotalSales for each ProductCategory.

How should you complete the DAX formula?

Values	Answer Area
<input type="button" value="ALL"/>	<input type="button" value="Measure1 = [TotalSales], CALCULATE([TotalSales],"/> <input type="button" value="Value"/>
<input type="button" value="ALLEXCEPT"/>	<input type="button" value="Value"/> <input type="button" value="Sales["/> <input type="button" value="Value"/> <input type="button" value="], Sales["/> <input type="button" value="Value"/> <input)<="" td="" type="button" value="])"/>
<input type="button" value="ALLSELECTED"/>	
<input type="button" value="CALCULATE"/>	
<input type="button" value="DIVIDE"/>	
<input type="button" value="Product"/>	
<input type="button" value="ProductCategory"/>	
<input type="button" value="ProductSubcategory"/>	

(Drag & Drop)

Check the answer and show the description

Answer is

**Measure1 = DIVIDE([TotalSales], CALCULATE([TotalSales],
ALL(Sales[ProductCategory], Sales[ProductSubcategory])))**

You have a customer table in Power BI Desktop. The customer table contains the columns as shown in the following table.

CustomerID	Display Name	SSN
1	Smith, John	987-65-4321
2	Smith, Gail	123-45-6789
3	White, Tony	010-20-4567
4	Mark, Keith	890-67-5432

You need to create a custom column that hides the first three digits of the SSN. The values in the new column must have the xxx-99-9999 format.

How should you complete the Query Editor formula?

**Values****Answer Area**

([SSN], ([SSN], 4), "xxx-")
 . . .

(Drag & Drop)

Check the answer and show the descriptionAnswer is **Text.Replace([SSN],Text.Start([SSN],4), "xxx-")**

You create a report in Power BI Desktop.

You need to embed the report into a Microsoft SharePoint Online site.

Which three actions should you perform in sequence?

Actions

-
-
-
-
-

Answer Area

1
 2
 3



(Drag & Drop)

Check the answer and show the descriptionAnswer is **5-4-1**

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

During the development process, you need to import a sample of the data from the Order table.

Solution: From Power Query Editor, you import the table and then add a filter step to the query.



Does this meet the goal?

(Question Series)

Yes

No

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

You are modeling data by using Microsoft Power BI. Part of the data model is a large Microsoft SQL Server table named Order that has more than 100 million records. During the development process, you need to import a sample of the data from the Order table.

Solution: You add a WHERE clause to the SQL statement.

Does this meet the goal?

(Question Series)

Yes

No

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

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

Solution: In the Power Query M code, you replace references to the Excel file with DataSourceExcel.

Does this meet the goal?

(Question Series)

Yes

No

Check the answer and show the description

Answer is **No**

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



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

Reference:

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

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

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

Solution: You modify the source step of the queries to use DataSourceExcel as the file path.

Does this meet the goal?

(Question Series)

Yes

No

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

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

Solution: You create a new query that references DataSourceExcel.

Does this meet the goal?

(Question Series)

Yes

No

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

During the development process, you need to import a sample of the data from the Order table.



Solution: You write a DAX expression that uses the FILTER function.

Does this meet the goal?

(Question Series)

Yes

No

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?

(Question Series)

Yes

No

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?

(Question Series)

Yes

No

Check the answer and show the description

Answer is Yes



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

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

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

Solution: You create a constant line and set the value to .5.

Does this meet the goal?

(Question Series)

Yes

No

You have a clustered bar chart that contains a measure named Salary as the value and a field named Employee as the axis. Salary is present in the data as numerical amount representing US dollars. You need to create a reference line to show which employees are above the median salary. Solution: You create a median line by using the Salary measure. Does this meet the goal?

(Question Series)

Yes

No

You have several reports and dashboards in a workspace.

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

Solution: You publish an app to the entire organization.

Does this meet the goal?

(Question Series)

Yes

No



Check the answer and show the description

Answer is **No**

The question asked to grant read only access to it's viewer. Based on the attached reference on workspaces, the Viewer role gives a read-only experience to its users. They can view dashboards, reports, or workbooks in the workspace, but can't browse the datasets or dataflows.

Instead assign all the users the Viewer role to the workspace.

You have several reports and dashboards in a workspace.
You need to grant all organizational users read access to a dashboard and several reports.

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

Does this meet the goal?

(Question Series)

Yes

No

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?

(Question Series)

Yes

No

You have several reports and dashboards in a workspace.
You need to grant all organizational users read access to a dashboard and several reports.

Solution: You enable included in app for all assets.



Does this meet the goal?

(Question Series)

Yes

No

You plan to develop a Power BI model as shown in the Power BI Model exhibit.

You plan to use Power BI to import data from 2013 to 2015.

Product Subcategory[Subcategory] contains NULL values.

End of Repeated Scenario.

You implement the Power BI model.

You need to add a new column to the Product Subcategory table that uses the following formula.

=if [Subcategory]=null then "NA" else [Subcategory]

Which command should you use in Query Editor?

(Question Series)

Conditional Column

Column From Examples

Invoke Custom Function

Custom Column

You have a Microsoft SQL Server database that has the tables shown in the Database Diagram exhibit.



dimGeography
[GeographyKey]
[City]
[StateProvinceCode]
[StateProvinceName]
[CountryRegionCode]
[EnglishCountryRegionName]
[PostalCode]
[SalesTerritoryKey]
[IpAddressLocator]

Sales
[ProductKey]
[OrderDateKey]
[DueDateKey]
[ShipDateKey]
[CustomerKey]
[PromotionKey]
[CurrencyKey]
[SalesTerritoryKey]
[SalesOrderNumber]
[SalesOrderLineNumber]
[OrderQuantity]
[UnitPrice]
[ExtendedAmount]
[UnitPriceDiscountPct]
[DiscountAmount]
ProductStandardCost
[TotalProductCost]
[SalesAmount]
[TaxAmt]
[Freight]
[OrderDate]
[DueDate]
[ShipDate]

dimProduct
[ProductKey]
[ProductSubcategoryKey]
[EnglishProductName]
[Color]
[ListPrice]
[Size]
[StartDate]
[EndDate]
[Status]

dimCustomer
[CustomerKey]
[GeographyKey]
[DisplayName]
[MaritalStatus]
[Gender]
[YearlyIncome]

Sales
[ProductKey]
[OrderDateKey]
[DueDateKey]
[ShipDateKey]
[CustomerKey]
[PromotionKey]
[CurrencyKey]
[SalesTerritoryKey]
[SalesOrderNumber]
[SalesOrderLineNumber]
[OrderQuantity]
[UnitPrice]
[ExtendedAmount]
[UnitPriceDiscountPct]
[DiscountAmount]
ProductStandardCost
[TotalProductCost]
[SalesAmount]
[TaxAmt]
[Freight]
[OrderDate]
[DueDate]
[ShipDate]

dimProductSubcategory
[ProductSubcategoryKey]
[ProductSubcategoryAlternateKey]
[EnglishProductSubcategoryName]
[SpanishProductSubcategoryName]
[FrenchProductSubcategoryName]
[ProductCategoryKey]

dimProductCategory
[ProductCategoryKey]
[ProductCategoryAlternateKey]
[EnglishProductCategoryName]
[SpanishProductCategoryName]
[FrenchProductCategoryName]

You plan to develop a Power BI model as shown in the Power BI Model exhibit.

You plan to use Power BI to import data from 2013 to 2015.

Product Subcategory[Subcategory] contains NULL values.

End of Repeated Scenario.

You are implementing the Power BI model.

You need to edit the Product Category query to match the desired Power BI model.

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

Values	Answer Area
Table.Combine	let Source = Sql.Database("localhost"), DB1 = Source([Name="DB1"])[Data], dbo_DimProductCategory = DB1{[Schema="dbo",Item="DimProductCategory"]}[Data], #"Var1" = Value
Table.RemoveColumns	#"Var1" = Value (dbo_DimProductCategory, {"ProductCategoryAlternateKey", "SpanishProductCategoryName", "FrenchProductCategoryName"})
Table.RemoveRows	#"Var2" = Value (#"Var1", {"EnglishProductCategoryName", "Category"})
Table.RenameColumns	
Table.ReorderColumns	
Table.SelectColumns	#"Var2"



(Question Series)

Check the answer and show the description

Answer is **Table.Remove Columns and Table.RenameColumns**

You plan to use Power BI to import data from 2013 to 2015.

Product Subcategory[Subcategory] contains NULL values.

End of Repeated Scenario.

You implement the Power BI model.

You need to create a hierarchy that has Category, Subcategory, and Product.

Which three actions should you perform in sequence?

Actions

Answer Area

To the Product Subcategory table, add a calculated measure that uses the RELATED ('Product Category' [Category]) DAX function.



To the Product table, add a column named Category that uses the RELATED ('Product Category' [Category]) DAX function.



To the Product table, add a calculated measure that uses the RELATED ('Product Category' [Category]) DAX function.

Create a hierarchy.

To the Product table, add a column named SubCategory that uses the RELATED ('Product Subcategory' [Subcategory]) DAX function.

To the Product Subcategory table, add a column named Category that uses the RELATED ('Product Category' [ProductCategoryKey]) DAX function.

(Question Series)

Check the answer and show the description

Answer is **5-2-4**

You plan to use Power BI to import data from 2013 to 2015.

Product Subcategory[Subcategory] contains NULL values.



End of Repeated Scenario.

You implement the Power BI model.

You need to add a measure to rank total sales by product. The results must appear as shown in the following table.

Rank	Product	SalesAmount
1	Product3	13,0000
1	Product2	13,0000
2	Product1	12,0000
3	Product5	10,000
3	Product4	10,000

Which DAX formula should you use?

(Question Series)

Product Ranking = RANKX(ALL('Product'), [SalesAmount],,,Asc, Dense)

Product Ranking = RANKX(ALL('Product'), [SalesAmount],,,DESC, Skip)

Product Ranking = RANKX(ALL('Product'), [SalesAmount],,,DESC, Dense)

Product Ranking = RANKX(Product, [SalesAmount],,,DESC, Skip)

You plan to use Power BI to import data from 2013 to 2015.

Product Subcategory[Subcategory] contains NULL values.

End of Repeated Scenario.

You need to create a measure of Sales[SalesAmount] where Product[Color] is Red or

Product[Size] is 50.

Which DAX formula should you use?

```
[Total Sales] :=
CALCULATE (
    SUM([SalesAmount]),
    All('Product'[Color], 'Product'[Size])
)
```

A.

```
[Total Sales] :=
CALCULATE (
    SUM([SalesAmount]),
    'Product'[Color] = "Red" || 'Product'[Size] = 50
)
```

B.



```
[Total Sales] :=  
CALCULATE (  
    SUM([SalesAmount]),  
    FILTER (  
        'Product',  
        'Product'[Color] = "Red" ||  
        'Product'[Size] = 50  
    )  
)  
  
C.  
[Total Sales] :=  
CALCULATE (  
    SUM([SalesAmount]),  
    FILTER (  
        'Product'[Color] = "Red" ||  
        'Product'[Size] = 50  
    )  
)  
  
D.
```

(Question Series)

Check the answer and show the description

Answer is C

You can write a filter over two columns using a filter over the entire table that contains both columns.

```
[Sales Red or Contoso - table filter] :=  
CALCULATE (  
    [Sales Amount],  
    FILTER (  
        'Product',  
        'Product'[Color] = "Red" || 'Product'[Brand] = "Contoso"  
    )  
)
```

You plan to use Power BI to import data from 2013 to 2015.

Product Subcategory[Subcategory] contains NULL values.

End of Repeated Scenario.



You implement the Power BI model.

You add another table named Territory to the model. A sample of the data is shown in the following table.

TerritoryKey	TerritoryName
1	United States
1	USA
2	Canada
2	Can
3	United Kingdom
3	UK

You need to create a relationship between the Territory table and the Sales table.

Which function should you use in the query for Territory before you create the relationship?

(Question Series)

Table.Distinct

Table.IsDistinct

Table.ReplaceMatchingRows

Table.RemoveMatchingRows

You have a Microsoft SQL Server database that has the tables shown in the Database Diagram exhibit.



dimGeography
[GeographyKey]
[City]
[StateProvinceCode]
[StateProvinceName]
[CountryRegionCode]
[EnglishCountryRegionName]
[PostalCode]
[SalesTerritoryKey]
[IpAddressLocator]

Sales
[ProductKey]
[OrderDateKey]
[DueDateKey]
[ShipDateKey]
[CustomerKey]
[PromotionKey]
[CurrencyKey]
[SalesTerritoryKey]
[SalesOrderNumber]
[SalesOrderLineNumber]
[OrderQuantity]
[UnitPrice]
[ExtendedAmount]
[UnitPriceDiscountPct]
[DiscountAmount]
ProductStandardCost
[TotalProductCost]
[SalesAmount]
[TaxAmt]
[Freight]
[OrderDate]
[DueDate]
[ShipDate]

dimProduct
[ProductKey]
[ProductSubcategoryKey]
[EnglishProductName]
[Color]
[ListPrice]
[Size]
[StartDate]
[EndDate]
[Status]

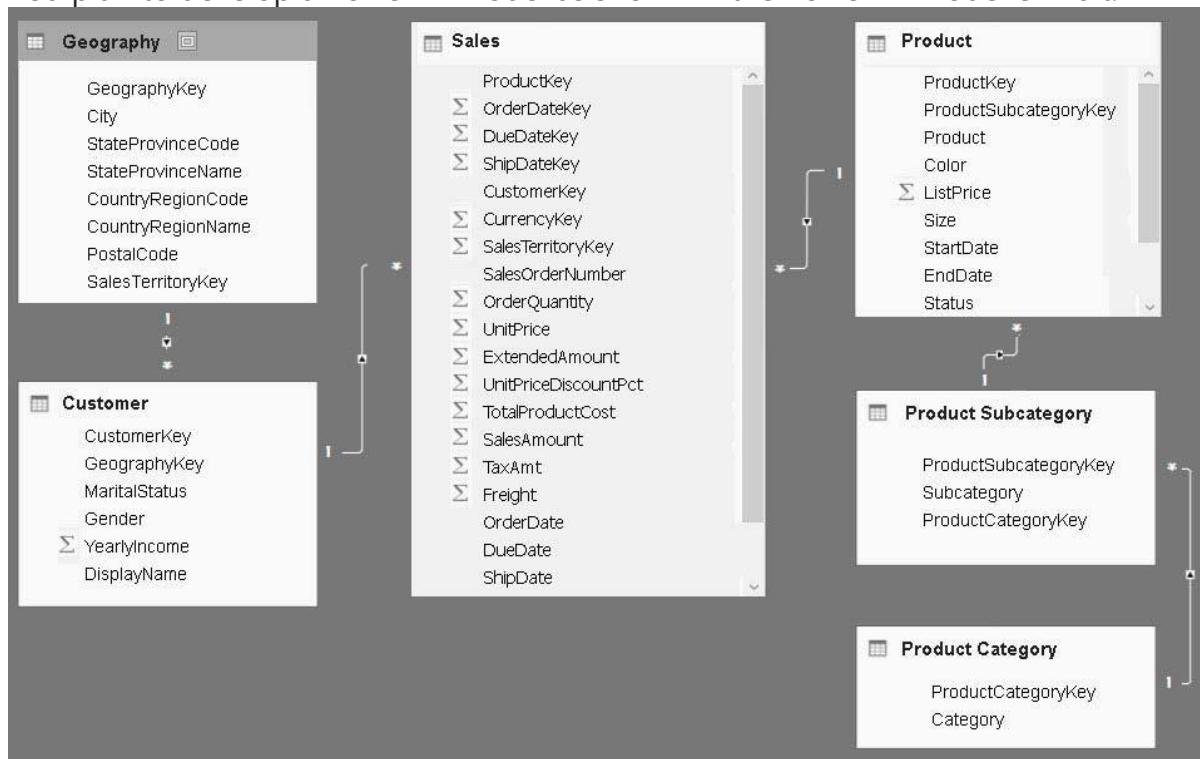
dimCustomer
[CustomerKey]
[GeographyKey]
[DisplayName]
[MaritalStatus]
[Gender]
[YearlyIncome]

Sales
[ProductKey]
[OrderDateKey]
[DueDateKey]
[ShipDateKey]
[CustomerKey]
[PromotionKey]
[CurrencyKey]
[SalesTerritoryKey]
[SalesOrderNumber]
[OrderQuantity]
[UnitPrice]
[ExtendedAmount]
[UnitPriceDiscountPct]
[DiscountAmount]
ProductStandardCost
[TotalProductCost]
[SalesAmount]
[TaxAmt]
[Freight]
[OrderDate]
[DueDate]
[ShipDate]

dimProductSubcategory
[ProductSubcategoryKey]
[ProductSubcategoryAlternateKey]
[EnglishProductSubcategoryName]
[SpanishProductSubcategoryName]
[FrenchProductSubcategoryName]
[ProductCategoryKey]

dimProductCategory
[ProductCategoryKey]
[ProductCategoryAlternateKey]
[EnglishProductCategoryName]
[SpanishProductCategoryName]
[FrenchProductCategoryName]

You plan to develop a Power BI model as shown in the Power BI Model exhibit.



You plan to use Power BI to import data from 2013 to 2015.

Product Subcategory[Subcategory] contains NULL values.



End of Repeated Scenario.

You implement the Power BI model.

You plan to add a table named Date to the model. The table will have columns for the date, year, month, and end of the last month, and will include data from January 1, 2013 to December 31, 2015.

The Date table and the Sales table will have a relationship.

Which DAX functions should you use to create the columns?

(Question Series)

CALENDARAUTO, YEAR, MONTH, and EOMONTH

CALENDAR, YEAR, MONTH, and ENDOFMONT

CALENDARAUTO, YEAR, MONTH, and ENDOFMONT

CALENDAR, YEAR, MONTH, and EOMONTH

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

You import a fact table named Sales as shown in the exhibit.

Sales RowID	Product Key	OrderDate Key	OrderDate	Customer Key	SalesTerritory Key	SalesOrder Number	SalesOrder LineNumber	Order Quantity	LineTotal	TaxAmt	Freight	LastModified	AuditID
1 1	310	20101229	2010-12-29 00:00:00.000	21768	6	SO43697	1	1	3578.27	286.2616	89.4568	2011-01-10 00:00:00.000	127
2 2	346	20101229	2010-12-29 00:00:00.000	28389	7	SO43698	1	1	3399.99	271.9992	84.9998	2011-01-10 00:00:00.000	127
3 3	346	20101229	2010-12-29 00:00:00.000	25863	1	SO43699	1	1	3399.99	271.9992	84.9998	2011-01-10 00:00:00.000	127
4 4	336	20101229	2010-12-29 00:00:00.000	14501	4	SO43700	1	1	699.0982	55.9279	17.4775	2011-01-10 00:00:00.000	127
5 5	346	20101229	2010-12-29 00:00:00.000	11003	9	SO43701	1	1	3399.99	271.9992	84.9998	2011-01-10 00:00:00.000	127
6 6	311	20101230	2010-12-30 00:00:00.000	27645	4	SO43702	1	1	3578.27	286.2616	89.4568	2011-01-11 00:00:00.000	127
7 7	310	20101230	2010-12-30 00:00:00.000	16624	9	SO43703	1	1	3578.27	286.2616	89.4568	2011-01-11 00:00:00.000	127

The related dimension tables are imported into the model.

Sales contains the data shown in the following table.



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

You are evaluating how to optimize the model.

For each of the following statements, select Yes if the statement is true. Otherwise, select No.

Answer Area

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

(Yes / No Questions)

Check the answer and show the description

Answer is Yes - No - No



Reference:

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

You have a Power BI model that contains two tables named Sales and Date. Sales contains four columns named TotalCost, DueDate, ShipDate, and OrderDate. Date contains one column named Date.

The tables have the following relationships:

- Sales[DueDate] and Date[Date]
- Sales[ShipDate] and Date[Date]
- Sales[OrderDate] and Date[Date]

The active relationship is on Sales[DueDate].

You need to create measures to count the number of orders by [ShipDate] and the orders by [OrderDate]. You must meet the goal without duplicating data or loading additional data.

Solution: You create a calculated table. You create a measure that uses the new table.

Does this meet the goal?

(Yes / No Questions)

Yes

No

You have a Power BI model that contains two tables named Sales and Date. Sales contains four columns named TotalCost, DueDate, ShipDate, and OrderDate.

Date contains one column named Date.

The tables have the following relationships:

- Sales[DueDate] and Date[Date]
- Sales[ShipDate] and Date[Date]
- Sales[OrderDate] and Date[Date]

The active relationship is on Sales[DueDate].

You need to create measures to count the number of orders by [ShipDate] and the orders by [OrderDate]. You must meet the goal without duplicating data or loading additional data.



Solution: You create measures that use the CALCULATE, COUNT, and FILTER DAX functions.

Does this meet the goal?

(Yes / No Questions)

Yes

No

Check the answer and show the description

Answer is Yes

This formula will achieve the target:

```
CALCULATE( COUNT(Sales[ShipDate]), FILTER(Sales, NOT(ISBLANK(Sales[ShipDate]))) ) )
```

You have a Power BI model that contains two tables named Sales and Date. Sales contains four columns named TotalCost, DueDate, ShipDate, and OrderDate. Date contains one column named Date.

The tables have the following relationships:

- Sales[DueDate] and Date[Date]
- Sales[ShipDate] and Date[Date]
- Sales[OrderDate] and Date[Date]

The active relationship is on Sales[DueDate].

You need to create measures to count the number of orders by [ShipDate] and the orders by [OrderDate]. You must meet the goal without duplicating data or loading additional data.

Solution: You create two copies of the Date table named ShipDate and OrderDateGet. You create a measure that uses the new tables.

Does this meet the goal?

(Yes / No Questions)

Yes

No



You have a user named User1. User1 is a member of a security group named Contoso PowerBI.

User1 has access to a workspace named Contoso Workspace.

You need to prevent User1 from exporting data from the visualizations in Contoso Workspace.

Solution: From the Microsoft Office 365 Admin center, you remove User1 from the All Users security group.

Does this meet the goal?

(Yes / No Questions)

Yes

No

Answer is **No**

You should prevent users to export data from here;

Power Bi Admin Portal -> Tenant Settings -> Export data

You have a user named User1. User1 is a member of a security group named Contoso PowerBI.

User1 has access to a workspace named Contoso Workspace.

You need to prevent User1 from exporting data from the visualizations in Contoso Workspace.

Solution: From the Microsoft Office 365 Admin center, you modify the properties of Contoso PowerBI.

Does this meet the goal?

(Yes / No Questions)

Yes

No

Check the answer and show the description



Answer is **Yes**

You can change level of access by editing the workspace properties. User 1 doesn't need to be removed, all you have to do is change their role i.e editing the workspace.

References:

<https://docs.microsoft.com/en-us/power-bi/service-manage-app-workspace-in-power-bi-and-office-365>

You have a user named User1. User1 is a member of a security group named Contoso PowerBI.

User1 has access to a workspace named Contoso Workspace.

You need to prevent User1 from exporting data from the visualizations in Contoso Workspace.

Solution: From the PowerBI setting, you modify the Developer Settings.

Does this meet the goal?

(Yes / No Questions)

Yes

No

You have an app workspace that contains a report. The report contains sensitive data. You need to ensure that you can embed the report into a custom application that will be accessed by external users. The external users will NOT have a Microsoft Azure Active Directory user account or Power BI licenses. Solution: From Publish to web, generate an iFrame. Does this meet the goal?

(Yes / No Questions)

Yes

No

Check the answer and show the description

Answer is **No**

iFrames can only be embedded into internal pages and need authentication, while the question wants to address external users.



You have an app workspace that contains a report. The report contains sensitive data.

You need to ensure that you can embed the report into a custom application that will be accessed by external users. The external users will NOT have a Microsoft Azure Active Directory user account or Power BI licenses.

Solution: Configure the app workspace to be read-only for members and to run in a shared capacity.

Does this meet the goal?

(Yes / No Questions)

Yes

No

You have an app workspace that contains a report. The report contains sensitive data.

You need to ensure that you can embed the report into a custom application that will be accessed by external users. The external users will NOT have a Microsoft Azure Active Directory user account or Power BI licenses.

Solution: Purchase Power BI Premium P1, and then configure the app workspace to run in a dedicated capacity.

Does this meet the goal?

(Yes / No Questions)

Yes

No

You have a Microsoft Excel workbook that is saved to Microsoft SharePoint Online. The workbook contains several Power View sheets.

You need to recreate the Power View sheets as reports in the Power BI service.

Solution: From Excel, click Publish to Power BI, and then click Export.

Does this meet the goal?

(Yes / No Questions)

Yes

No



Check the answer and show the description

Answer is **Yes**

Aim is to have Power View sheets shown as Reports. That's done via Publish -> Export.

Export workbook data to Power BI

When you choose the Export option, any supported data in tables and/or a data model are exported into a new dataset in Power BI. Any Power View sheets in the workbook are re-created in Power BI as reports.

You have a Microsoft Excel workbook that is saved to Microsoft SharePoint Online. The workbook contains several Power View sheets.

You need to recreate the Power View sheets as reports in the Power BI service.

Solution: From the Power BI service, get the data from SharePoint Online, and then click Import.

Does this meet the goal?

(Yes / No Questions)

Yes

No

Check the answer and show the description

Answer is **Yes**

1. Excel workbook -> publish -> "upload" -> PowerBI.com "connect" (view only in powerBI, only editable in Excel workbook)

2. Excel workbook -> publish -> "export" -> PowerBI.com "import" (sync both side, editable both side and updated both side)

References:

<https://docs.microsoft.com/en-us/power-bi/connect-data/service-excel-workbook-files>

<https://docs.microsoft.com/en-us/power-bi/connect-data/service-publish-from-excel>



You have a query for a table named Sales. Sales has a column named CustomerID. The Data Type of CustomerID is Whole Number.

You refresh the data and find several errors. You discover that new entries in the Sales table contain nonnumeric values.

You need to ensure that nonnumeric values in the CustomerID column are set to 0.

Solution: From Query Editor, select the CustomerID column. Click Replace Errors", and enter a value of 0

Does this meet the goal?

(Yes / No Questions)

Yes

No

You have a query for a table named Sales. Sales has a column named CustomerID. The Data Type of CustomerID is Whole Number.

You refresh the data and find several errors. You discover that new entries in the Sales table contain nonnumeric values.

You need to ensure that nonnumeric values in the CustomerID column are set to 0.

Solution: From Query Editor, open Advanced Editor and add the following query step.

`#"Replaced Errors"=Table.ReplaceErrorValues(#"Changed Type",{{"CustomerID",0}})`

Does this meet the goal?

(Yes / No Questions)

Yes

No

Check the answer and show the description

Answer is **No**

the code is correct but the answer is B (No) because you need to add the code and specify that the 'in' argument retrieves the last command line, not the previous step that was showing on.

You have a query for a table named Sales. Sales has a column named CustomerID. The Data Type of CustomerID is Whole Number.



You refresh the data and find several errors. You discover that new entries in the Sales table contain nonnumeric values.

You need to ensure that nonnumeric values in the CustomerID column are set to 0.

Solution: From Query Editor, select the CustomerID column and click Remove Errors.

Does this meet the goal?

(Yes / No Questions)

Yes

No

Overview

Litware, Inc. is an online retailer that uses Microsoft Power BI dashboards and reports.

The company plans to leverage data from Microsoft SQL Server databases, Microsoft Excel files, text files, and several other data sources.

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

Existing Environment

Sales Data

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



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

In the Date table, the date_id column has a format of yyyyymmdd and the month column has a format of yyymm.

The week column in the Date table and the week_id column in the Weekly_Returns table have a format of yyyyww.

The sales_id column in the Sales table represents a unique transaction.

The region_id column can be managed by only one sales manager.

Data Concerns

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

Reporting Requirements

Litware identifies the following technical requirements:

Executives require a visual that shows sales by region.

Regional managers require a visual to analyze weekly sales and returns.



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

You need to create a calculated column to display the month based on the reporting requirements.

Which DAX expression should you use?
(Case Studies)

```
FORMAT('Date'[date], "MMM YYYY")
FORMAT('Date' [date], "M YY")
FORMAT('Date'[date_id], "MMM") & "" & FORMAT('Date'[year], "#")
FORMAT('Date' [date_id], "MMM YYYY")
```

Check the answer and show the description

Answer is **FORMAT('Date' [date_id], "MMM YYYY")**

Scenario:

In the Date table, the date_id column has a format of yyyyymmdd. Users must be able to see the month in reports as shown in the following example:
Feb 2020.

You need to review the data for which there are concerns before creating the data model.
What should you do in Power Query Editor?
(Case Studies)

Transform the sales_amount column to replace negative values with 0.

Select Column distribution.

Select the sales_amount column and apply a number filter.

Select Column profile, and then select the sales_amount column.



Check the answer and show the description

Answer is **Transform the sales_amount column to replace negative values with 0.**

Scenario: Data Concerns

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

How to convert negative numbers into positive numb, editor and right click, select transform, and choose absolute value. That would give the positive number outcome you're looking for.

You need to provide a solution to provide the sales managers with the required access.

What should you include in the solution?

(Case Studies)

Create a security role that has a table filter on the Sales_Manager table where username = UserName().

Create a security role that has a table filter on the Region_Manager table where sales_manager_id = UserPrincipalName().

Create a security role that has a table filter on the Sales_Manager table where name = UserName().

Create a security role that has a table filter on the Sales_Manager table where username = sales_manager_id.

Check the answer and show the description

Answer is **Create a security role that has a table filter on the Sales_Manager table where username = UserName().**

The Power BI DAX USERNAME() function helps to return the user domain login with the form of (DomainUser) in the locality or your local system. The Power BI DAX USERPRINCIPALNAME() function helps to return the user principal name with the form of (User's login credential or Preeti@.onmicrosoft.com) in the Power BI Online Service. Assuming username in the table contains DomainUser data, answer is A.



Question

You need to create a relationship between the Weekly_Retuns table and the Date table to meet the reporting requirements of the regional managers.

What should you do?

(Case Studies)

Add the Weekly_Retuns data to the Sales table by using RELATED DAX functions.

In the Weekly_Retuns table, create a new calculated column named date_id in a format of yyyyymmdd and use the calculated column to create a relationship to the Date table.

Create a new table based on the Date table where date_id is unique, and then create a many-to-many relationship to Weekly_Return.

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

What should you create?

(Case Studies)

an additional date table named ShipDate, a one-to-many relationship from Date[date_id] to Sales[Sales_date_id], and a one-to-many relationship from ShipDate[date_id] to Sales[sales_ship_date_id]

an additional date table named ShipDate, a many-to-many relationship from Sales[sales_date_id] to Date[date_id], and a many-to-many relationship from Sales[sales_ship_date_id] to ShipDate[date_id]

a one-to-many relationship from Date[date_id] to Sales[sales_date_id] and another one-to-many relationship from Date[date_id] to Weekly_Returns[week_id]

a one-to-many relationship from Sales[sales_date_id] to Date[date_id] and a one-to-many relationship from Sales[sales_ship_date_id] to Date[date_id]

Check the answer and show the description

Answer is **an additional date table named ShipDate, a one-to-many relationship from Date[date_id] to Sales[Sales_date_id], and a one-to-many relationship from ShipDate[date_id] to Sales[sales_ship_date_id]**

Scenario:

The customer service department requires a visual that can be filtered by both sales month



and ship month independently.

In Power BI Desktop, only one relationship can be active between a Fact table and Dimension table, so we need an extra table.

Use one-to-many relationship to be able to filter.

Incorrect Answers:

C: Cannot make a relation between a date_id and a week_id.

D: The one-to-many relationships between the Sales and the Date tables goes in the other direction: for each date there can be many sales or shipments.

Reference:

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

You need to create a visualization to meet the reporting requirements of the sales managers.

How should you create the visualization?



Answer Area

Visualization type:

Card
Donut chart
Gauge
Key influencers
KPI

Indicator:

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

Trend axis:

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

Target goals:

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

(Case Studies)

Check the answer and show the description

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

Box 1: KPI

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



Box 2: Sales[sales_amount]

Box 3: Date[month]

Time > FiscalMonth. This value will represent the trend.

Box 4: Targets[sales_target]

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

How should you complete the measure? To answer, drag the appropriate values to the correct targets.

Values	Answer Area
AND	Total Projected Revenue =
IF	[] (
ISFILTERED	NOT ([] ('Date' [Date])),
KEEPFILTERS	[] (Projection[Revenue Projection])
SUM)
SUMX	

(Case Studies)

Check the answer and show the description

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

Box 1: IF

Box 2: ISFILTERED

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

Box 3: SUM



Reference:

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

Overview

Contoso, Ltd. is a manufacturing company that produces outdoor equipment. Contoso has quarterly board meetings for which financial analysts manually prepare Microsoft Excel reports, including profit and loss statements for each of the company's four business units, a company balance sheet, and net income projections for the next quarter.

Existing Environment

Data and Sources

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

Monthly revenue and expense projections for the next quarter come from a Microsoft SharePoint Online list. Quarterly projections relate to the profit and loss results by using the following shared dimensions: date, business unit, department, and product category.

Net Income Projection Data

Net income projection data is stored in a SharePoint Online list named Projections in the format shown in the following table.

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

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



Balance Sheet Data

The balance sheet data is imported with final balances for each account per month in the format shown in the following table.

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

There is always a row for each account for each month in the balance sheet data.

Dynamics 365 Business Central Data

Business Central contains a product catalog that shows how products roll up to product categories, which roll up to business units.

Revenue data is provided at the date and product level. Expense data is provided at the date and department level.

Business Issues

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

Requirements

Planned Changes

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



Technical Requirements

Contoso wants the reports and datasets refreshed with minimal manual effort. The company wants to provide a single package of reports to the board that contains custom navigation and links to supplementary information.

Maintenance, including manually updating data and access, must be minimized as much as possible.

Security Requirements

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

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

Report Requirements

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

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

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

The definitions and attributes of products, departments, and business units must be consistent across all reports.

The board must be able to get the following information from the quarterly reports:
Revenue trends over time

Ending balances for each account

A comparison of expenses versus projections by quarter

Changes in long-term liabilities from the previous quarter

A comparison of quarterly revenue versus the same quarter during the prior year



What is the minimum number of Power BI datasets needed to support the reports?
(Case Studies)

- two imported datasets
- a single DirectQuery dataset
- two DirectQuery datasets
- a single imported dataset

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

(Case Studies)

`CALCULATE (SUM(BalanceSheet [BalanceAmount]), DATESQTD('Date'[Date]))`

`CALCULATE (SUM(BalanceSheet [BalanceAmount]), LASTDATE('Date'[Date]))`

`FIRSTNONBLANK ('Date' [Date] SUM(BalanceSheet[BalanceAmount]))`

`CALCULATE (MAX(BalanceSheet[BalanceAmount]), LASTDATE('Date' [Date]))`

Check the answer and show the description

Answer is **CALCULATE (SUM(BalanceSheet [BalanceAmount]), DATESQTD('Date'[Date]))**

Scenario:

At least one of the balance sheet reports in the quarterly reporting package must show the ending balances for the quarter, as well as for the previous quarter.

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

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?



Answer Area

Type of calculation:

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

Formula:

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

(Case Studies)



Check the answer and show the description

Answers are;

An M custom column

Date.EndOfMonth(#date([Yes],[Month],1))

let

```
Source = Excel.CurrentWorkbook(){[Name="DateYearQ"]}[Content],
#"Changed Type" = Table.TransformColumnTypes(Source,{{"Month", Int64.Type}, {"Year", Int64.Type}}),
#"Added Custom" = Table.AddColumn(#"Changed Type", "Custom", each
    Date.EndOfMonth(#date([Year], [Month], 1))),
#"Changed Type1" = Table.TransformColumnTypes(#"Added Custom",{{"Custom", type
    date}})
in
#"Changed Type1"
```

Question

Which two types of visualizations can be used in the balance sheet reports to meet the reporting goals?

(Case Studies)

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

a clustered column chart that shows balances by date (x-axis) and account category (legend) without filters.



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

a pie chart that shows balances by account category without filters.

a ribbon chart that shows balances by quarter and accounts in the legend.

You need to grant access to the business unit analysts.

What should you configure?

Answer Area

Permissions required in powerbi.com:

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

Permissions for the profit and loss dataset:

Build
Delete
Reshare

Box 1: The Viewer role to the workspace

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

Box 2: Build

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