Step 1: Open Power BI Desktop Open Power BI Desktop and select "Get Data" on the Home tab in the Power BI Desktop ribbon.

Step 2: Select the data source In the Get Data window, select "Samples" and then choose "Sales and Marketing" from the list of available samples.

Step 3: Connect to the data source Click on "Connect" to connect to the Sales and Marketing sample data.

Step 4: Load the data In the Navigator window, select the "Sales" table and then click on "Load" to load the data into Power BI.

Step 5: Create a new measure In the Fields pane on the right-hand side of the screen, right-click on the "Sales" table and select "New Measure" from the context menu. This will open the Formula Bar at the top of the screen.

Step 6: Write a DAX formula In the Formula Bar, type the DAX formula that you want to use to create the measure. For example, if you want to calculate the sum of sales, you could use the following formula:

Total Sales = SUM(Sales[SalesAmount])

Step 7: Name the measure Give the measure a name that describes what it does. In the example above, you might name the measure "Total Sales".

Step 8: Test the measure Click on the "Check" button in the Formula Bar to test the measure. If there are any errors in the formula, they will be displayed in the Error tab at the bottom of the screen.

Step 9: Add the measure to a visual Once you have created a measure, you can add it to a visual on your report. Simply drag the measure from the Fields pane onto the visual and it will be added as a value.

Step 10: Use DAX functions to manipulate data DAX functions can be used to manipulate data in many different ways. For example, you can use the CALCULATE function to filter data based on specific criteria. Here's an example of how to use the CALCULATE function to filter sales data for a specific region:

Total Sales for North Region = CALCULATE(SUM(Sales[SalesAmount]), Sales[Region] = "North")

Step 11: Save and share the report Once you have created the report with your DAX measures and functions, you can save it and share it with others. You can also publish the report to the Power BI service to make it available to others online.

Step 12: Find a new dataset and use DAX in a creative way.

That's it! With these steps, you can load the Sales and Marketing sample data into Power BI and start using DAX to create powerful reports and visualizations.

PART 2: Context and Date Tables

Step 1: Load the Sales and Marketing sample data In Power BI Desktop, select "Get Data" on the Home tab in the Power BI Desktop ribbon. In the Get Data window, select "Samples" and then choose "Sales

and Marketing" from the list of available samples. Click on "Connect" to connect to the Sales and Marketing sample data. In the Navigator window, select the "Sales" table and then click on "Load" to load the data into Power BI.

Step 2: Create a Date table In the Fields pane on the right-hand side of the screen, right-click on the "Sales" table and select "New Table" from the context menu. In the formula bar at the top of the screen, type the following DAX formula to create a Date table:

```
Date = CALENDAR(MIN(Sales[OrderDate]), MAX(Sales[OrderDate]))
```

This formula creates a table with a single column named "Date" that contains a range of dates from the earliest to latest date in the Sales table.

Step 3: Create a relationship between the Sales and Date tables In the Fields pane, select the "Date" table and then drag the "Date" column to the "OrderDate" column in the "Sales" table. This creates a relationship between the two tables based on the "OrderDate" column.

Step 4: Create a measure using Row Context In the Fields pane, right-click on the "Sales" table and select "New Measure" from the context menu. In the formula bar, type the following DAX formula to calculate the total sales for each individual product:

```
Total Sales by Product = SUMX(Sales, Sales[SalesAmount])
```

This formula uses the SUMX function to iterate over each row in the Sales table and sum the values in the SalesAmount column for each individual product.

Step 5: Create a measure using Filter Context In the Fields pane, right-click on the "Sales" table and select "New Measure" from the context menu. In the formula bar, type the following DAX formula to calculate the total sales for a specific date range:

```
Total Sales by Date Range = CALCULATE(SUM(Sales[SalesAmount]), DATESBETWEEN(Date[Date], DATE(2017, 1, 1), DATE(2017, 3, 31)))
```

This formula uses the CALCULATE function to calculate the sum of the SalesAmount column for the date range between January 1, 2017 and March 31, 2017.

Step 6: Create a visualization To create a visualization that shows the total sales by product, drag the "Product" column from the Sales table and the "Total Sales by Product" measure to a table or chart visual. To create a visualization that shows the total sales by date range, drag the "Date" column from the Date table and the "Total Sales by Date Range" measure to a line chart or other appropriate visual.

That's it! With these steps, you can create Row and Filter contexts using DAX measures and create a Date table to enhance your data model.