## Introduction to DAX in Power BI

## 1/ Creating calculated columns and measures :

We would like to work with Sales DataSet, So either you load the file from the Dataset folder or you open **1\_1\_profit\_column.pbix** in exercise folder

1/ Rename the page to "Profit"



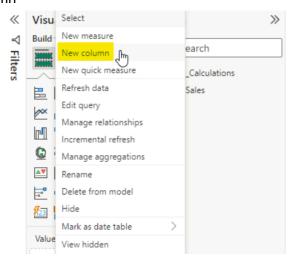
- 2/ Create a new column in the Sales table called Profit that subtracts line cost from line price
  - 1st you need to select Sales table

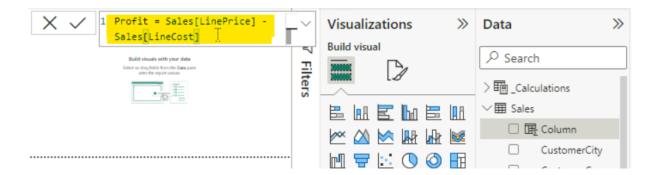


- 2nd right click

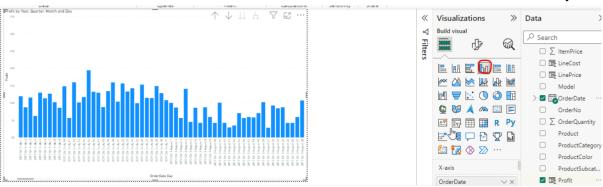


- 3rd select New column

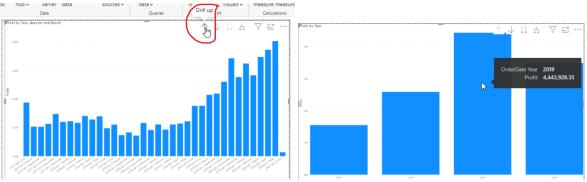




4th Create a Clustered column chart that shows the sum of Profit for each order year



## Now, to see how much profit did adventure works cycles generates in 2019



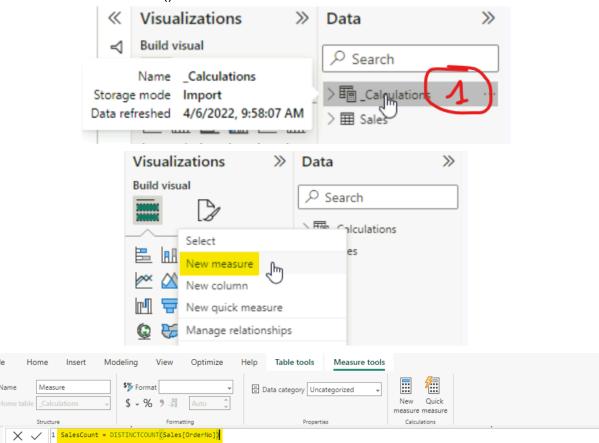
Now you will be utilizing a COUNT function to understand the general trend of orders since Adventure Works started operating.

So if you lost progress, or you'd like to start from here you can simply start with opening **1\_2\_sales\_count.pbix** from the exercise folder.

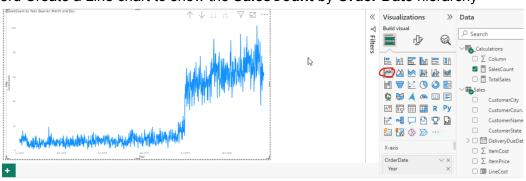
- 1st Create a new page in the report and called "Sales Count"



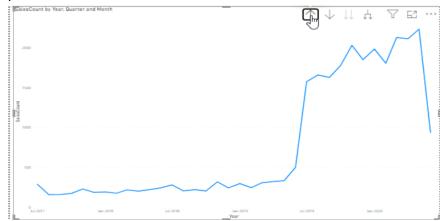
- 2nd Create a new measure SalesCount inside the \_Calculations table which uses the DISTINCTCOUNT() function on the column that contains order numbers.



- 3rd Create a Line chart to show the **SalesCount** by **Order Date** hierarchy



- By default, it has drilled down to the lowest level in the hierarchy. Use the drill feature to "Drill Up" one level to see the Month Year view.



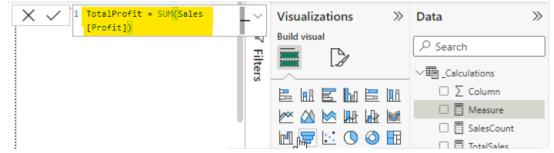
Now you will utilize the DIVIDE() function to create a measure to represent the profit margin ratio.

So if you lost progress, or you'd like to start from here you can simply start with opening **1\_3\_profit\_margin\_ratio.pbix** from the exercise folder.

- 1st Create a new page in the report and called "Profit Margin Ratio"



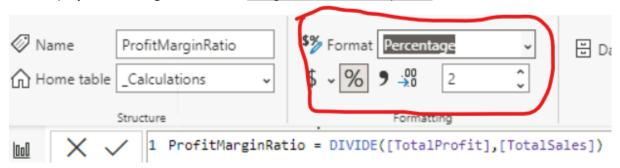
- 2nd Create **TotalProfit** measure inside the **\_Calculations** table, which takes the sum of all the profit.



 3rd Create a measure called ProfitMarginRatio which divides TotalProfit by TotalSales inside the \_Calculations table

ProfitMarginRatio = DIVIDE([TotalProfit],[TotalSales])

- 4rth Display **ProfitMarginRatio** as a <a href="mailto:with2">%tage with 2</a> decimal points.



- 5th Create a line chart to visualize the the ProfitMarginRatio by Order Year

