M vs DAX

Calculated Column vs Measure

Quick measure

Measure tables
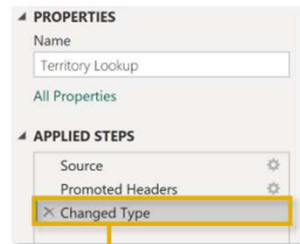
Power BI

M Language vs DAX

M Language	DAX
Used in Power Query Editor	Used in Power BI front-end
Designed for specifically extracting, transforming & loading data	Is designed specifically for analysing relational data models.

Query Editor:

▲ PROPERTIES
Name
Territory Lookup
All Properties

▲ APPLIED STEPS
Source ⚙
Promoted Headers ⚙
✕ Changed Type

```
#"Changed Type" = Table.TransformColumnTypes(    // Adding a new step
  #"Promoted Headers",                           // after we promoted headers
  {
    {"SalesTerritoryKey", Int64.Type},           // that changes column datatypes
```

Report View:

Category Name	Total Returns	Bike Returns
Accessories	1,115	
Bikes	427	427
Clothing	267	
Total	**1,809**	**427**

```
1  Bike Returns =
2  CALCULATE(
3      [Total Returns],                                    // Counting total returns
4      'Product Categories Lookup'[Category Name] = "Bikes" // filtered for bikes only
5  )
```
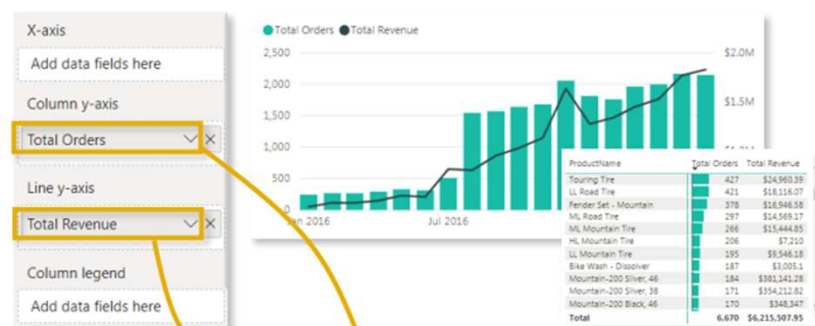
Calculated Columns Vs Measures

Calculated Columns	Measures
Values are calculated based on information from each row of a table (**row context**)	Values are calculated based on information from any filters in the report (**filter context**)
Appends static values to each row in a table and stores them in the model (which **increases file size**)	Does not create new data in the tables themselves (**doesn't increase file size**)
Recalculate on data source refresh or when changes are made to component column	Recalculate in response to any change to filters within the report
• Primarily used for **filtering** data in reports	Primarily used for **aggregating** values in report visuals

Measures "live" in **visuals**

Quick measures

Measure Tables