# Creating Calculated Columns, a Date Table, and Relationships



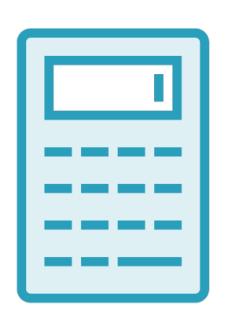
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# Calculated Columns, Date Tables and Relationships



### Calculated Columns



# A column whose value is calculated from one or more other columns

- Concatenate two text columns
- Mathematical calculations

# Can be performed in Power BI desktop or the Query Editor

- The Query Editor has a nicer UI ©



# Demo



Creating a calculated column





#### Date Table

# Contains the full set of dates between two points in time

- For example, all the dates from January 1st 2015 to December 31st 2025
- Custom columns created for other values
  - Day, month, year, day of week, week number, quarter, etc.

#### Filtering on a date range

#### Time comparisons

- Year on year sales



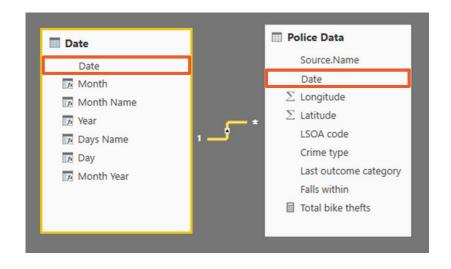
# Demo



Creating a date table



# Linking Tables Together



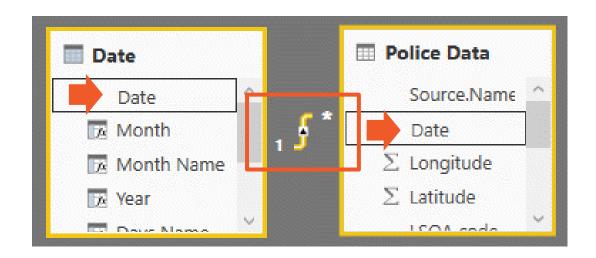
#### Tables must be linked in order to

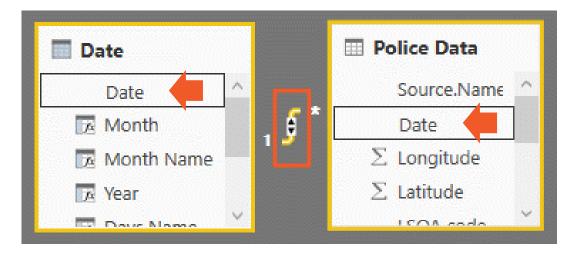
- Provide filtering
- Use time comparisons

Also known as "creating relationships"



## Relationship Properties





## Cardinality

One to many (1:\*)

One to one (1:1)

Many to one (\*:1)

### **Cross Filter Direction**







# Demo



**Creating relationships** 



## Summary



#### **Calculated columns**

- Additional shaping

#### Date table

- Required for time calculations and date filtering

#### Relationships

- Cardinality
- Cross filter direction

