

# DAX Cheat Sheet

#### **PROBLEM**

## **CALCULATION EXPRESSION**

**Total Sales Calculation** 

Calculated measure using SUM to aggregate a column.
Total Sales = SUM('TableName'[SalesAmount])

**Total Cost Calculation** 

Calculated measure using SUM to aggregate a column.
Total Cost = SUM('TableName'[Cost])

**Profit Calculation** 

Calculated measure using two previously created calculated measures to determine profit.

Profit = [Total Sales] - [Total Cost]

**Profit Margin** 

Calculated measure using two previously created calculated measures to determine profit margin, the DIVIDE function is used to perform the division.

Profit Margin = DIVIDE( [Profit], [Total Sales])

**Transaction Count** 

Calculated measure that returns a count of all rows in a table, ultimately, many times this simple calculation is used to return transaction counts.

Transactions = COUNTROWS('Table')

Related Table Count

Returns the total rows in a related table. For example, total transactions by Product.

Transactions = COUNTROWS(RELATEDTABLE('TABLE'))



# **DAX CHEAT SHEET**

Month & Year to Date Sales

### **PROBLEM**

### **CALCULATION EXPRESSION**

**MTD Sales** 

Calculates Total Sales for all days in the current month up to the maximum day in the selection.

MTD Sales = TOTALMTD( [Total Sales],
'DateTable'[DateColumn] )

MTD Sales (Direct Query) Calculates Total Sales for all days in the current month up to the maximum day in the selection.

MTD Sales =
CALCULATE (
[Total Sales], FILTER (ALL ( 'DateTable' ),
'DateTable'[DateYear] = MAX ( 'DateTable'[DateYear] )
&&'DateTable'[DateMonth] = MAX ('DateTable'[DateMonth])

YTD Sales

Calculates Total Sales for all days in the year up to the maximum day in the selection.

&&'DateTable'[Date] <= MAX ( 'DateTable'[Date] )

YTD Sales = TOTALYTD( [Total Sales],
'DateTable'[DateColumn] )

YTD Sales (Fiscal Calendar) This calculation uses an optional third parameter specifying the fiscal year end date.

```
YTD Sales = TOTALYTD( [Total Sales],
'DateTable'[DateColumn], "05/31" )
```

YTD Sales (Direct Query)

Calculates Total Sales for all days in the year up to the maximum day in the selection.

```
YTD Sales: =
CALCULATE ([Total Sales],FILTER (ALL ( 'DateTable' ),
'DateTable'[DateYear] = MAX ( 'DateTable'[DateYear] )
&&'DateTable'[Date] <= MAX ( 'DateTable'[Date] )</pre>
```



# DAX Cheat Sheet

**Prior Year Sales** 

#### **PROBLEM**

# **CALCULATION EXPRESSION**

Prior Year Profit

Prior Year Profit = CALCULATE ( [Profit],
SAMEPERIODLASTYEAR'DateTable'[DateColumn] )

Prior Year Profit (Direct Query)

Calculates Profit for all days in the Year prior to the last year in the selection. Limited to the last day of the selection.

```
Prior Year Profit =
CALCULATE ([Profit],
FILTER (ALL ( 'DateTable' ),
'DateTable'[Year] = MAX ( 'DateTable'[Year] ) - 1
```

Year Over Year Profit

Calculated measure using two previously created calculated measures to determine YoY profit.

```
YoY Profit = [Profit] - [Prior Year Profit]
```

Last Year YTD Sales Last YTD Sales = CALCULATE ( [YTD Sales],
SAMEPERIODLASTYEAR('DateTable'[DateColumn] ))

Total Sales for All Countries

This calculation uses calculate to return all countries in the calculation regardless of the filter context.

```
Total Sales All Countries = CALCULATE ( [Total Sales], ALL('Geography Table'[Country] ) )
```

Percent of Total
Calculation

This calculation uses two measures previously created to create a percent of total calculation.

```
Percent of Total = DIVIDE([Total Sales], [Total Sales
All Countries])
```



# DAX Cheat Sheet

**Moving Totals** 

#### **PROBLEM**

## **CALCULATION EXPRESSION**

Rolling 12 Month Sales Calculated measure that returns a rolling 12 months total for Profit.

```
Rolling 12 Months Profit =
CALCULATE ( [Profit],
DATESBETWEEN('DateTable'[DateColumn] ,
NEXTDAY(SAMEPERIODLASTYEAR
(LASTDATE(DateTable'[DateColumn] ))),
LASTDATE('DateTable'[DateColumn])))
```

7 Day Moving Average Profit This calculation generates the daily moving average. The number of days can be changed accordingly.

```
7 Day Moving Average =
AVERAGEX (FILTER (ALL ( 'DateTable' ),
'DateTable'[FullDateAlternateKey] > ( MAX
('DateTable'[FullDateAlternateKey] ) - 7 ) &&
'DateTable'[FullDateAlternateKey] > <= MAX
('DateTable'[FullDateAlternateKey] ) ),
([Profit])</pre>
```

Country Rank

Calculated measure to rank a specific column in a table by a measure. In this measure Country from the geography table is being ranked by the measure [Total Sales].

```
Country Rank = RANKX( ALL ('GeographyTable'[Country]),
[Total Sales],,,Skip)
```