[DAX Functions in Power BI] {CheatSheet}

Math and Trig Functions:

- **SUMX**: SUMX(Sales, Sales[Quantity] * Sales[Price])
- **AVERAGE**: AVERAGE('Table'[Column])
- **MIN**: MIN('Table'[Column])
- **MAX**: MAX('Table'[Column])
- **ROUND**: ROUND('Table'[Number], 2)
- **ABS**: ABS('Table'[Number])
- **EXP**: EXP('Table'[Exponent])
- **LOG**: LOG('Table'[Number], 10)

Text Functions:

- **CONCATENATE**: CONCATENATE('Table'[Text1], 'Table'[Text2])
- **LEFT**: LEFT('Table'[Text], 3)
- **RIGHT**: RIGHT('Table'[Text], 5)
- **LEN**: LEN('Table'[Text])
- **UPPER**: UPPER('Table'[Text])
- **LOWER**: LOWER('Table'[Text])
- **TRIM**: TRIM('Table'[Text])
- **SEARCH**: SEARCH("keyword", 'Table'[Text])

Date and Time Functions:

- **TODAY**: TODAY()
- **NOW**: NOW()
- **YEAR**: YEAR('Table'[Date])
- **MONTH**: MONTH('Table'[Date])
- **DAY**: DAY('Table'[Date])
- **DATEDIFF**: DATEDIFF('Table'[StartDate], 'Table'[EndDate], DAY)
- **EOMONTH**: EOMONTH('Table'[Date], 0)
- **FORMAT**: FORMAT('Table'[Date], "yyyy-mm-dd")

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Statistical Functions:

- **AVERAGEX**: `AVERAGEX('Table', 'Table'[Column])`
- **COUNT**: `COUNT('Table'[Column])`
- **COUNTA**: `COUNTA('Table'[Column])`
- **COUNTAX**: `COUNTAX('Table', 'Table'[Column])`
- **STDEV.P**: `STDEV.P('Table'[Column])`
- **VAR.P**: `VAR.P('Table'[Column])`

Logical Functions:

- **IF**: `IF('Table'[Column] > 10, "Yes", "No")`
- **AND**: `AND('Table'[Column1] > 5, 'Table'[Column2] < 10)`
- **OR**: `OR('Table'[Column1] > 5, 'Table'[Column2] < 10)`
- **NOT**: `NOT('Table'[Flag])`
- **SWITCH**: `SWITCH('Table'[Category], "A", 1, "B", 2, 0)`

Filter and Relationship Functions:

- **FILTER**: `FILTER('Table', 'Table'[Column] > 100)`
- **RELATED**: `RELATED('RelatedTable'[Column])`
- **CALCULATE**: `CALCULATE(SUM('Table'[Sales]), 'Table'[Year] = 2023)`
- **ALL**: `ALL('Table')`

Statistical Distribution Functions:

- **NORM.DIST**: `NORM.DIST(1.96, 0, 1, TRUE)`
- **NORM.INV**: `NORM.INV(0.95, 0, 1)`
- **BINOM.DIST**: `BINOM.DIST(3, 10, 0.5, FALSE)`
- **POISSON.DIST**: `POISSON.DIST(2, 5, FALSE)`

Financial Functions:

- **PV**: `PV(0.05, 10, 1000, 0, 0)`
- **FV**: `FV(0.05, 10, -100, 0, 0)`
- **NPV**: `NPV(0.1, CashFlow1, CashFlow2, CashFlow3)`
- **IRR**: `IRR(CashFlows)`

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Ranking Functions:

- **RANKX**: RANKX('Table', 'Table'[Sales], , DESC)
- **TOPN**: TOPN(5, 'Table', 'Table'[Sales], DESC)
- **RANK.EQ**: RANK.EQ('Table'[Sales], 'Table'[Sales], DESC)

Statistical Testing Functions:

- **T.TEST**: T.TEST('Group1'[Data], 'Group2'[Data], 2, 1)
- **ANOVA**: ANOVA('Table'[Values], 'Table'[Category])
- **CHISQ.DIST**: CHISQ.DIST(3.84, 2, FALSE)

Time Intelligence Functions:

- **TOTALYTD**: TOTALYTD(SUM('Table'[Sales]), 'Date'[Date])
- **SAMEPERIODLASTYEAR**: CALCULATE(SUM('Table'[Sales]), SAMEPERIODLASTYEAR('Date'[Date]))
- **YTD**: CALCULATE(SUM('Table'[Sales]), ALL('Date'), 'Date'[Date] <= MAX('Date'[Date]))
- **QUARTER**: QUARTER('Date'[Date])
- **MONTH**: MONTH('Date'[Date])
- **WEEKDAY**: WEEKDAY('Date'[Date], 2)
- **CALENDAR**: CALENDAR(DATE(2023, 1, 1), DATE(2023, 12, 31))
- **DATESBETWEEN**: DATESBETWEEN('Date'[Date], DATE(2022, 1, 1), DATE(2022, 12, 31))
- **TOTALMTD**: TOTALMTD(SUM('Table'[Sales]), 'Date'[Date])
- **FIRSTDATE**: FIRSTDATE('Date'[Date])
- **LASTDATE**: LASTDATE('Date'[Date])

Statistical Testing Functions:

- **PERCENTILE.INC**: PERCENTILE.INC('Table'[Values], 0.75)
- **PERCENTILE.EXC**: PERCENTILE.EXC('Table'[Values], 0.75)
- **RANK.AVG**: RANK.AVG('Table'[Sales], 'Table'[Category], 1)
- **KEEPFILTERS**: KEEPFILTERS(CALCULATE(SUM('Table'[Sales]), 'Table'[Category] = "A"))

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Table Functions:

- **VALUES**: VALUES('Table'[Column])
- **ALLSELECTED**: ALLSELECTED('Table')
- **ADDCOLUMNS**: ADDCOLUMNS('Table', "Revenue", 'Table'[Quantity] * 'Table'[Price])
- **SUMMARIZE**: SUMMARIZE('Table', 'Table'[Category], "Total Sales", SUM('Table'[Sales]))
- **ROLLUP**: ROLLUP('Date', 'Date'[Year], 'Date'[Quarter], 'Date'[Month])
- **KEEPFILTERS**: KEEPFILTERS(CALCULATETABLE('Table', 'Table'[Column] > 100))

Parent-Child Functions:

- **PATH**: PATH('Table', 'Table'[ParentID], 'Table'[ID])
- **PATHITEM**: PATHITEM('Table'[Path], 1)
- **PATHLENGTH**: PATHLENGTH('Table'[Path])
- **ISFILTERED**: IF(ISFILTERED('Table'[Column]), "Filtered", "Not Filtered")

Advanced Analytics Functions:

- **PREDICT**: PREDICT('Table', 'Table'[Value], FILTER('Table', 'Table'[Date] > DATE(2022, 1, 1)))
- **COVARIANCE.P**: COVARIANCE.P('Table1'[Values], 'Table2'[Values])
- **CORRELATION**: CORRELATION('Table1'[Values], 'Table2'[Values])
- **RANK.EQ**: RANK.EQ('Table'[Sales], 'Table'[Sales], DESC, 'Table'[Category])
- **PREDICT**: PREDICT('Table', 'Table'[Value], FILTER('Table', 'Table'[Date] > DATE(2022, 1, 1)))
- **COVARIANCE.P**: COVARIANCE.P('Table1'[Values], 'Table2'[Values])

Information Functions:

- **ISBLANK**: IF(ISBLANK('Table'[Column]), "Blank", "Not Blank")
- **ISERROR**: IF(ISERROR(1/0), "Error", "No Error")
- **TYPEOF**: TYPEOF('Table'[Column], INTEGER)

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Parameter Table Functions:

- **SELECTCOLUMNS**: `SELECTCOLUMNS('Table', 'Table'[Column1], 'Table'[Column2])`
- **SUMMARIZECOLUMNS**: `SUMMARIZECOLUMNS('Table'[Column1], 'Table'[Column2], "Total Sales", SUM('Table'[Sales]))`

Text Filtering Functions:

- **CONTAINSSTRING**: `CONTAINSSTRING('Table'[Text], "keyword")`
- **LEFT**: `LEFT('Table'[Text], 3)`
- **RIGHT**: `RIGHT('Table'[Text], 5)`

Financial Time Intelligence Functions:

- **TOTALYTD**: `TOTALYTD(SUM('Table'[Revenue]), 'Date'[Date])`
- **CLOSINGBALANCEMONTH**: `CLOSINGBALANCEMONTH('Table'[Revenue], 'Date'[Date])`
- **OPENINGBALANCEMONTH**: `OPENINGBALANCEMONTH('Table'[Revenue], 'Date'[Date])`

Filter and Row Context:

- **EARLIER**: `CALCULATE(SUM('Table'[Sales]), 'Table'[Date] = EARLIER('Table'[Date]) - 1)`
- **FILTERS**: `FILTERS('Table'[Category])`
- **USERELATIONSHIP**: `USERELATIONSHIP('Table1'[Column], 'Table2'[Column])`

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