

# Power BI DAX Functions Cheat Sheet

## 1. Aggregation & Statistical Functions

- **SUM(column)** — Sum of all values in a column
  - **SUMX(table, expression)** — Sum of evaluated expression across rows
  - **AVERAGE(column) / AVERAGEX(table, expression)** — Average value
  - **COUNT, COUNTA, COUNTROWS** — Count rows or non-blank entries
  - **MIN, MAX** — Minimum and maximum values
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## 2. Mathematical & Trigonometric Functions

Includes **ABS, ACOS, ASIN, ROUND, STDEV, VAR**, and more.

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## 3. Date & Time / Time Intelligence

- **DATE, YEAR, MONTH, DAY, NOW, TODAY**
  - Time Intelligence: **DATESYTD, TOTALYTD, SAMEPERIODLASTYEAR, DATEADD, DATEDIFF**
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## 4. Logical, Information & Operators

- **IF, SWITCH, NOT** — Conditional logic
  - **ISTEXT, ISNUMBER, ISBLANK** — Data type checks
  - Operators: **+, -, \*, /, &&, ||**, etc.
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## 5. Text Functions

- **CONCATENATE, UPPER, LOWER, PROPER, LEN, SUBSTITUTE, REPLACE**
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## 6. Lookup & Relationship Functions

- **LOOKUPVALUE** — Fetch values from another table
  - **RELATED** — Get values via table relationships
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## 7. Filter & Context Functions

- **FILTER(table, condition)** — Filter rows based on condition
  - **CALCULATE(expression, filters...)** — Modify filter context for calculations
  - **ALL, ALLEXCEPT, ALLSELECTED** — Control context removal or preservation
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## 8. Ranking & Iterators

- **RANKX(table, expression)** — Rank values in a table
  - **X functions (e.g., SUMX, AVERAGEX, COUNTX, MINX, MAXX)** — Row-wise evaluation across tables
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## 9. Advanced & Others

- **CALCULATETABLE** — Returns filtered table
  - **RELATEDTABLE, SUMMARIZE, ADDCOLUMNS** — Table manipulation and enrichment
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## Top 10 Most Used DAX Functions

1. **CALCULATE**
  2. **SUM, SUMX**
  3. **CALCULATETABLE**
  4. **RANKX**
  5. **DATEDIFF**
  6. **DATEADD**
  7. **COUNT, COUNTROWS**
  8. **LOOKUPVALUE**
  9. **FILTER**
  10. **RELATED**
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# Quick Reference Table

Category	Key Functions	----- -----	Aggregation & Stats
SUM, AVERAGE, COUNT*, MIN, MAX		Math & Stats	ROUND, ABS, STDEV, VAR, ACOS...
	Date/Time + Time Intelligence	DATE, NOW, TODAY, DATESYTD, SAMEPERIODLASTYEAR, DATEADD	
Logical / Info / Operators	IF, SWITCH, ISTEAD, ISBLANK, +, -, &&,		Text
CONCATENATE, UPPER, LEN, REPLACE		Lookup / Relationship	LOOKUPVALUE, RELATED
	Filter & Context	FILTER, CALCULATE, ALL, ALLEXCEPT	
Ranking & Iterators	RANKX, SUMX, AVERAGEX, COUNTX, MINX, MAXX		Advanced & Table Manipulation
CALCULATETABLE, ADDCOLUMNS, RELATEDTABLE, SUMMARIZE			

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## Resources

- Microsoft official DAX reference: <https://learn.microsoft.com/en-us/dax/dax-function-reference>
- Community resource: <https://dax.guide>
- Pragmatic Works Cheat Sheet: <https://pragmaticworks.com/resources/cheat-sheet/dax>