Excel Text Functions – Detailed Guide

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1. LEFT(text, num_chars)

- **Definition**: Extracts a given number of characters from the left side of a text string.
- **Syntax**:
  =LEFT(text, num_chars)
  - **text** → The cell or string from which characters are extracted.
  - **num_chars** → Number of characters to extract (default is 1 if omitted).
- **Use Cases**:
  - Extracting **prefix codes** (e.g., product code starting letters).
  - Getting initials of names.
- **Example**:
  If A2 = "ExcelFunctions"
  =LEFT(A2, 5) → "Excel"

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2. RIGHT(text, num_chars)

- **Definition**: Extracts a given number of characters from the right side of a text string.
- **Syntax**:
  =RIGHT(text, num_chars)
  - **text** → The string or cell reference.
  - **num_chars** → Number of characters from the right side.
- **Use Cases**:
  - Extracting **last 4 digits of mobile number**.
  - Getting file extensions (e.g., ".jpg", ".xlsx").
- **Example**:
  If B2 = "9876543210"
  =RIGHT(B2, 4) → "3210"

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3. MID(text, start_num, num_chars)

- **Definition**: Returns a specific number of characters from the **middle** of a text string.
- **Syntax**:
  =MID(text, start_num, num_chars)
  - **text** → The string or cell reference.

- **start_num** → Position of the first character to extract.
- **num_chars** → Number of characters to return.

- **Use Cases**:
  - Extracting middle codes like **PIN/branch code** inside an ID.
  - Picking part of names.
- **Example**:
  If C2 = "AB123CD456"
  =MID(C2, 3, 3) → "123"

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4. LEN(text)

- **Definition**: Returns the total number of characters in a string (including spaces).
- **Syntax**:
  =LEN(text)
- **Use Cases**:
  - Count characters in passwords/usernames.
  - Validate mobile numbers (10 digits).
- **Example**:
  If D2 = "Excel 2025"
  =LEN(D2) → 10 (spaces included)

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5. TRIM(text)

- **Definition**: Removes **extra spaces** from text, leaving only single spaces between words.
- **Syntax**:
  =TRIM(text)
- **Use Cases**:
  - Cleaning imported data with irregular spacing.
  - Preparing data for lookup or matching.
- **Example**:
  If E2 = " Hello World "
  =TRIM(E2) → "Hello World"

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6. UPPER(), LOWER(), PROPER()

- **Definition**: Change the **text case**.
- **Syntax**:

    - =UPPER(text) → Converts text to **ALL CAPITALS**.
    - =LOWER(text) → Converts text to **all lowercase**.
    - =PROPER(text) → Converts text to **Title Case** (first letter capitalized).
- **Use Cases**:
    - Standardizing text formatting (e.g., names, addresses).
- **Examples**:
  If F2 = "anuj kumar"
    - =UPPER(F2) → "ANUJ KUMAR"
    - =LOWER(F2) → "anuj kumar"
    - =PROPER(F2) → "Anuj Kumar"

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7. CONCAT() / TEXTJOIN()

- **Definition**: Combine multiple text strings.
- **Syntax**:
    - =CONCAT(text1, [text2], ...)
    - =TEXTJOIN(delimiter, ignore_empty, text1, [text2], ...)
- **Key Difference**:
    - CONCAT → Just combines text (no delimiter option).
    - TEXTJOIN → Allows a delimiter (comma, space, dash) and can ignore empty cells.
- **Use Cases**:
    - Merging first and last names.
    - Creating full addresses from multiple cells.
- **Examples**:
  If G2 = "Anuj", H2 = "Kumar"
    - =CONCAT(G2," ",H2) → "Anuj Kumar"
    - =TEXTJOIN(" ", TRUE, G2, H2) → "Anuj Kumar"

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8. TEXT(value, format_text)

- **Definition**: Converts a number, date, or time into text in a specified format.
- **Syntax**:
  =TEXT(value, format_text)

- **Use Cases**:
    - Format dates as "January 2025", "DD/MM/YYYY".
    - Format numbers as currency or percentage.
- **Examples**:
  If I2 = 01-01-2025
    - =TEXT(I2,"dd-mmm-yyyy") → "01-Jan-2025"
    - =TEXT(I2,"mmmm yyyy") → "January 2025"
      If J2 = 1234.567
    - =TEXT(J2,"$#,##0.00") → "$1,234.57"

Excel Date Functions – Detailed Description

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1. TODAY()

- **Definition**: Returns the **current system date** (without time).
- **Syntax**:
  =TODAY()
- **Parameters**: None.
- **Use Cases**:
  - Automatically insert today's date.
  - Calculate age, due dates, or deadlines dynamically.
- **Example**:
  If today is **27-Sep-2025**,
  =TODAY() → 27-Sep-2025

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2. NOW()

- **Definition**: Returns the **current system date and time**.
- **Syntax**:
  =NOW()
- **Parameters**: None.
- **Use Cases**:
  - Track timestamp of entry.
  - Show real-time clock in dashboards.
- **Example**:
  If current date & time = **27-Sep-2025 06:15 AM**,
  =NOW() → 27-Sep-2025 06:15

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3. DAY(), MONTH(), YEAR()

- **Definition**: Extract specific parts of a date.
- **Syntax**:
  - =DAY(date) → Returns day (1–31).
  - =MONTH(date) → Returns month (1–12).
  - =YEAR(date) → Returns year (4-digit).
- **Use Cases**:

    - Extract day/month/year for reports.
    - Build custom date formats.
- **Example**:
  If A2 = 15-Aug-2025:
    - =DAY(A2) → 15
    - =MONTH(A2) → 8
    - =YEAR(A2) → 2025

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4. EDATE(start_date, months)

- **Definition**: Adds or subtracts months from a date.
- **Syntax**:
  =EDATE(start_date, months)
    - **start_date** → The original date.
    - **months** → No. of months to add (positive) or subtract (negative).
- **Use Cases**:
    - Calculate maturity dates for loans.
    - Add/subtract billing cycle months.
- **Example**:
  If B2 = 01-Jan-2025:
    - =EDATE(B2, 3) → 01-Apr-2025
    - =EDATE(B2, -2) → 01-Nov-2024

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5. EOMONTH(start_date, months)

- **Definition**: Returns the **last day of the month** after adding/subtracting months.
- **Syntax**:
  =EOMONTH(start_date, months)
    - **start_date** → The base date.
    - **months** → No. of months to add/subtract.
- **Use Cases**:
    - Get last day of billing cycle.
    - Find month-end deadlines.
- **Example**:
  If C2 = 15-Jan-2025:

- =EOMONTH(C2, 0) → 31-Jan-2025
- =EOMONTH(C2, 1) → 28-Feb-2025

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6. DATEDIF(start_date, end_date, unit)

- **Definition**: Calculates difference between two dates in **years, months, or days**.
- **Syntax**:
  =DATEDIF(start_date, end_date, unit)
  - **unit** can be:
    - "Y" → Difference in years.
    - "M" → Difference in months.
    - "D" → Difference in days.
    - "YM" → Months ignoring years.
    - "YD" → Days ignoring years.
    - "MD" → Days ignoring months & years.
- **Use Cases**:
  - Calculate **age** in years.
  - Find exact difference in months or days.
- **Example**:
  If D2 = 01-Jan-2000, E2 = 27-Sep-2025:
  - =DATEDIF(D2, E2, "Y") → 25
  - =DATEDIF(D2, E2, "M") → 309
  - =DATEDIF(D2, E2, "D") → 9406

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7. WEEKDAY(serial_number, [return_type])

- **Definition**: Returns a number representing the **day of the week**.
- **Syntax**:
  =WEEKDAY(date, [return_type])
  - **return_type** (optional):
    - 1 → Sunday=1, Monday=2 ... Saturday=7 (default).
    - 2 → Monday=1, Tuesday=2 ... Sunday=7.
    - 3 → Monday=0, Tuesday=1 ... Sunday=6.
- **Use Cases**:

    - Identify weekdays vs weekends.
    - Schedule tasks based on weekdays.
- **Example**:
  If F2 = 27-Sep-2025 (Saturday):
    - =WEEKDAY(F2,1) → 7
    - =WEEKDAY(F2,2) → 6

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8. NETWORKDAYS(start_date, end_date, [holidays])

- **Definition**: Returns the **number of working days** (Mon–Fri) between two dates, excluding weekends and optional holidays.
- **Syntax**:
  =NETWORKDAYS(start_date, end_date, [holidays])
    - **holidays** → Optional range of dates to exclude.
- **Use Cases**:
    - Calculate project deadlines.
    - Count business days for payroll.
- **Example**:
  If start = 01-Jan-2025, end = 10-Jan-2025:
    - =NETWORKDAYS("01-Jan-2025","10-Jan-2025") → 8 (excludes weekends).
      If holidays = 01-Jan-2025,
    - =NETWORKDAYS("01-Jan-2025","10-Jan-2025", { "01-Jan-2025" }) → 7