

# -> give me all date and time function in excel for documentation in detail

Excel offers a wide range of functions for managing dates and times, which are stored as **serial numbers** to facilitate calculations. Dates are integers representing the number of days since January 1, 1900, while times are decimals representing the fraction of a day. This system allows you to add or subtract dates and times just like any other number.

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## Functions for Current Date and Time

- **=TODAY():** Returns the current date as a serial number. It doesn't take any arguments and updates every time the worksheet is recalculated.
  - **=NOW():** Returns the current date and time as a serial number. It's also a volatile function and updates with every recalculation.
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## Functions for Creating Dates and Times

- **=DATE(year, month, day):** Combines numeric year, month, and day values into a valid date. This is useful for creating dates from values in other cells or for ensuring Excel correctly interprets a date. For example, **=DATE(2025, 9, 23)** returns September 23, 2025.
  - **=TIME(hour, minute, second):** Combines numeric hour, minute, and second values into a valid time. For example, **=TIME(14, 30, 0)** returns 2:30 PM.
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## Functions for Extracting Date and Time Parts

These functions help you to extract specific components from a date or time value.

- **=YEAR(date\_serial\_number):** Returns the year (as a four-digit number) from a date.
- **=MONTH(date\_serial\_number):** Returns the month as a number from 1 (January) to 12 (December).
- **=DAY(date\_serial\_number):** Returns the day of the month as a number from 1 to 31.
- **=HOUR(time\_serial\_number):** Returns the hour as a number from 0 (12:00 AM) to 23 (11:00 PM).
- **=MINUTE(time\_serial\_number):** Returns the minute as a number from 0 to 59.

- =SECOND(time\_serial\_number): Returns the second as a number from 0 to 59.
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## Functions for Date and Time Calculations

- =DATEDIF(start\_date, end\_date, "unit"): This is a "hidden" but very useful function that calculates the difference between two dates.
  - **Unit:** Use "Y" for a full number of years, "M" for a full number of months, or "D" for a total number of days.
  - For example, =DATEDIF(A1, B1, "Y") calculates the number of complete years between the dates in cells A1 and B1.
- =EDATE(start\_date, months): Returns a date that is a specified number of months before or after a start date. For example, to find the date 3 months from today, you could use =EDATE(TODAY(), 3).
- =EOMONTH(start\_date, months): Returns the last day of the month that is a specified number of months before or after a start date.
- =NETWORKDAYS(start\_date, end\_date, [holidays]): Calculates the number of working days between two dates, excluding weekends (Saturday and Sunday). You can optionally provide a range of holiday dates to be excluded.
- =WORKDAY(start\_date, days, [holidays]): Returns a date a specified number of working days in the future or past, excluding weekends.

### Excel NOW Function | Excel One Minute Functions Explained

This video is relevant as it provides a concise explanation of the NOW function, which is a key part of Excel's date and time capabilities.