



Dates & Times Demystified

Dates are whole numbers. Times are fractions of a day. Everything below follows from that.

A4 fx =DATE(2026,9,28)+TIME(18,0,0)

	A	B	C
1	Displayed	Stored value	What it means
2	1-Jan-1900	1	Day 1 of Excel's count
3	29-Feb-1900	60	A date that never existed, kept for Lotus 1-2-3
4	28-Sep-2026 18:00	46293.75	Day 46293, plus 0.75 of a day (18 hours)
5	12:00 PM	0.5	Half a day
6	6:00 AM	0.25	A quarter of a day
7	31-Dec-9999	2958465	The last date Excel accepts

Formula	Returns
■ Build & read dates	
DATE(year, month, day)	A date from its parts
TIME(hour, minute, second)	A fraction of a day
TODAY() - NOW()	Date; date + time
YEAR / MONTH / DAY(date)	One part of a date
WEEKDAY(date, [type])	1-7, Sunday = 1
DATEVALUE(text)	Text → real date
■ Shift & schedule	
EDATE(s, months)	Date ± n months
EOMONTH(s, months)	Month-end, ± n months
EOMONTH(s, -1) + 1	First day of s's month
WORKDAY.INTL(s, n, [wk], [hol])	The date n workdays away
SEQUENCE(7, 1, TODAY())	Today...today+6 (2021+)
■ Week numbers	
WEEKNUM(date)	Weeks start Sunday
WEEKNUM(date, 2)	Weeks start Monday
ISOWEEKNUM(date)	ISO 8601 week (2013+)
WEEKNUM's week 1 holds 1 Jan; ISO week 1 holds the first Thursday.	

Formula	Returns
■ Measure the gap	
e - s	Days between
(e - s) * 24	Hours between
NETWORKDAYS.INTL(s, e, [wk], [hol])	Workdays, both ends
DATEDIF(s, e, "Y")	Whole years
DATEDIF(s, e, "M")	Whole months
DATEDIF(s, e, "YM")	Months past whole years
DATEDIF is hidden from autocomplete and needs s ≤ e. Skip its "MD" unit, which can be wrong.	
■ Weekend codes for .INTL functions	
1	Sat + Sun (the default)
2 ... 7	Sun + Mon ... Fri + Sat
11 ... 17	Sun only ... Sat only
"0000011"	Mon → Sun; 1 = day off
■ Custom format codes (Ctrl+1 > Custom)	
yyyy-mm-dd	2026-09-28
dddd, mmmm d	Monday, September 28
h:mm AM/PM	6:00 PM
[h]:mm	Elapsed hours past 24

s = start date · e = end date · n = number of days · wk = weekend code · hol = range of holiday dates

Watch out for			
29-Feb-1900. It exists only in Excel's calendar, so WEEKDAY is wrong before March 1900.	Text dates. Left-aligned by default; SUM skips them and they sort as text. Convert with DATEVALUE.	The 1904 system. Older Mac workbooks may use it; dates shift 1,462 days.	03/04/2026. March 4 or 3 April, by region. Build dates with DATE().