

# DATEDIF Function in Excel

A powerful tool for calculating time intervals between dates.



by **Excel Training London**



# What is DATEDIF?

## 1 Purpose

Calculate the difference between two dates in years, months, or days.

## 2 Origin

A "compatibility" function from Lotus 1-2-3 in the 1990s.

## 3 Availability

Present in all Excel versions but doesn't autocomplete.



# DATEDIF Syntax

```
=DATEDIF(start_date, end_date, unit)
```

## 1 start\_date

The earlier date in Excel date serial number format.

## 2 end\_date

The later date in Excel date serial number format.

## 3 unit

The time unit to use (years, months, or days).

```
DATEDIF x 2:28 + 0 1; 1.5 →
```



# Time Units in DATEDIF

Unit	Result
"y"	Difference in complete years
"m"	Difference in complete months
"d"	Difference in days
"md"	Days, ignoring months and years
"ym"	Months, ignoring years
"yd"	Days, ignoring years

# Basic DATEDIF Usage

=DATEDIF("1-Jan-2022","1-Mar-2024","y") // returns 2

=DATEDIF("1-Jan-2022","1-Mar-2024","m") // returns 26

=DATEDIF("1-Jan-2022","1-Mar-2024","d") // returns 790

DATEDIF calculates complete units, rounding down as needed.

DATEIF	LAL	CKL	CUL	BLL	DWL	DFL
DATEDAT	0.0%	18,573	8.05%	0.0%	0.59%	12.97%
DAT-DATIFF	9.5%	0.57%	0.55%	0.74	7.55%	17.10%
DAT-DAT7IFF	5.55%	11,540	5.55%	15,550	0.55%	10.55%
DAT-DATIFF	0.90%	0.55%	0.74%	0.74%	0.45%	0.45%
DAT-DATIFF	11.59%	21.57%	11.15%	10,770	21,070	20.15%
DAT-DATIFF	—	—	0.11%	11,070	11,05%	11.10%
DAT-DATIFF	21,89%	21,51%	11,51%	11,47%	11,51%	10.10%
DAT-DATIFF	—	—	—	—	—	—
DAT-DATIFF	0.54%	0.8%	0.55%	11,85%	0.17%	0.15%
DAT-DATIFF	11.57%	21,580	11.55%	11,570	0.97%	0.15%
DAT-DATIFF	—	—	—	—	—	0.75%
DAT-DATIFF	—	—	—	—	—	1.25%
EXCEL	—	—	—	—	—	—
DAT-DATIFF	0.45%	0.59%	0.55%	0.14%	0.55%	0.37%
DAT-DATIFF	0.59%	11.55%	0.15%	0.15%	0.17%	0.15%
DAT-DATIFF	—	—	—	—	—	0.85%
DAT-DATIFF	—	1.7%	—	—	1.95%	1.05%
FIMEL	—	—	—	—	—	—
DAT-DATIFF	110.09%	140.59%	121.51%	111.59%	111.89%	110.00%
DAT-DAT7IFF	11.95%	15.05%	21.51%	11.05%	14.65%	29.15%
DAT-DDA7IFF	19.50%	11.55%	21.55%	10.11%	15.05%	22.65%
DAT-DAT7IFF	24.00%	11.18%	21.55%	22,090	21.54%	24.03%
DAT-DAT7IFF	17,800	11,50%	21.55%	23,000	23,000	10.15%
DAT-DAT7IFF	0.99%	0.9%	—	0.71%	0.15%	0.24%
DAT-DAT7IFF	—	0.59%	1,51%	0.5%	0.29%	0.55%
DAT-DAT7IFF	0.70%	10,509	10.71%	0.55%	0.55%	0.15%
DAT-DAT7IFF	—	—	—	—	—	—
DAT-DAT7IFF	—	—	—	—	—	—
DAT-DAT7IFF	—	—	—	—	—	—
DAT-DAT7IFF	—	—	—	0.1	—	0.15%
DAT-DAT7IFF	—	—	—	—	—	—
DAT-DAT7IFF	0.5%	1,580	0.57%	0.51%	0.15%	0.55%
DAT-DAT7IFF	11,000	11,07%	11.57%	20,15%	21,150	20.15%
DAT-DAT7IFF	11,55%	11,07%	11,05%	11,170	11,40%	111.5%
DAT-DAT7IFF	—	—	—	—	—	—



# Calculating Days with DATEDIF

1

## Total Days

=DATEDIF(B5,C5,"d")

2

## Days Ignoring Years

=DATEDIF(B6,C6,"yd")

3

## Days Ignoring Months and Years

=DATEDIF(B7,C7,"md")

# Calculating Months with DATEDIF

## Complete Months

=DATEDIF(B5,C5,"m")

## Months Ignoring Years

=DATEDIF(B6,C6,"ym")

DATEDIF always rounds months down to the nearest whole month.



# Calculating Years with DATEDIF

## 1 Complete Years

`=DATEDIF(B5,C5,"y")`

## 2 Fractional Years

`=YEARFRAC(B7,C7)`

DATEDIF only calculates complete years. Use YEARFRAC for fractional years.



# Calculating Age from Birthday

```
=DATEDIF(A1,TODAY(),"y")
```

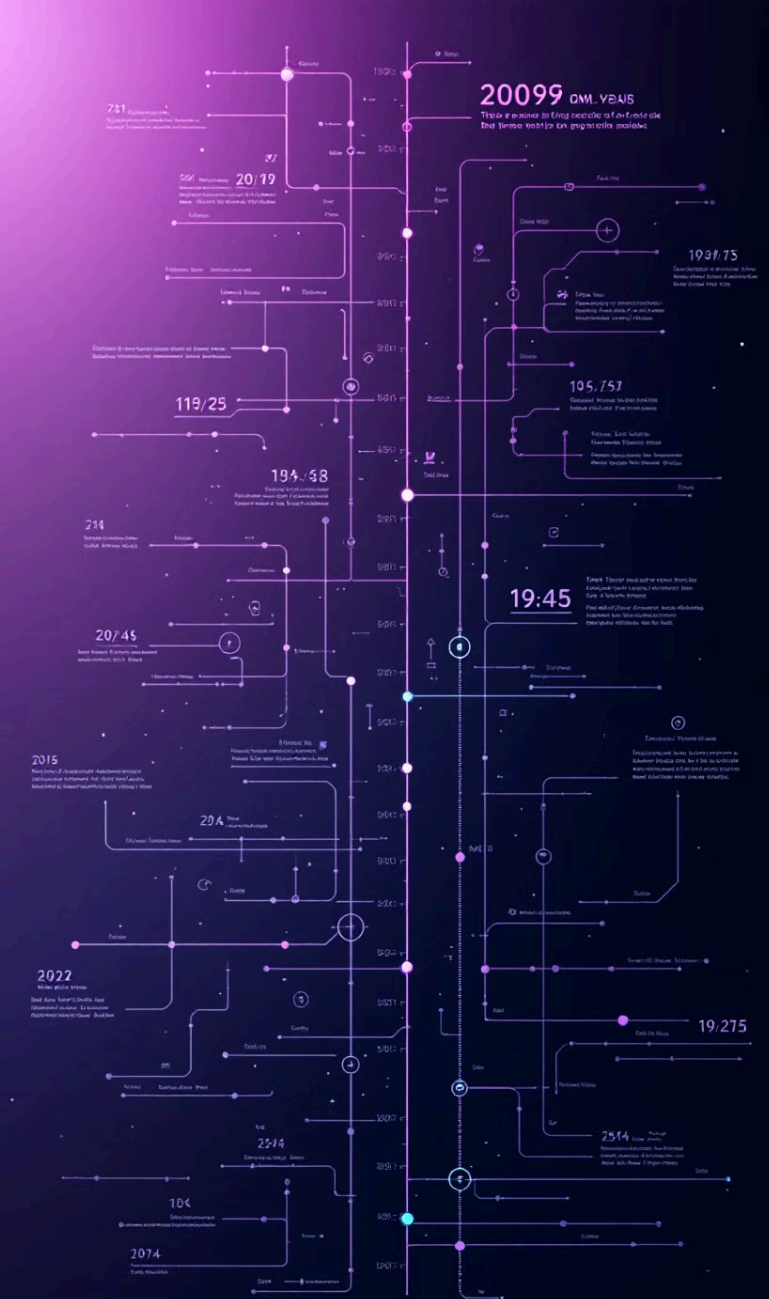
Use DATEDIF with TODAY() to calculate current age from a birth date.



# Years, Months, and Days Between Dates

```
=DATEDIF(B5,C5,"y")&" years, "&DATEDIF(B5,C5,"ym")&" months, "  
&DATEDIF(B5,C5,"md")&" days"
```

Combine multiple DATEDIF calls to get a detailed time difference.





# DATEDIF Limitations

## 1 No Autocomplete

Excel won't help fill in DATEDIF arguments.

## 2 Date Order

#NUM error if start\_date is after end\_date.

## 3 "MD" Unit

May give inaccurate results. Use with caution.

# Related Functions



## NETWORKDAYS

Calculates working days between dates.



## YEARFRAC

Returns fractional years between dates.

360°

## DAYS360

Calculates days based on 360-day year.

A laptop screen with a dark background and glowing text. The text 'NETWORKDAYS' and 'YEARFRAC' is in bright green, and 'DAYS360' is in purple. The background of the image is a blurred office scene with blue and purple lighting.

**NETWORKDAYS**  
**YEARFRAC**

**DAYS360**