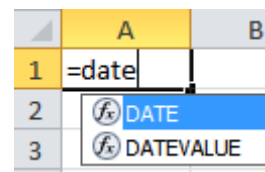# Where's the DATEDIF function?

You may notice that this function does not appear in the Insert Function dialog box, is not listed in the Date & Time drop-down list, and does not appear in the Formula AutoComplete list. Therefore, to use this function, you must always enter it manually.

The **DATEDIF** function has its origins in Lotus 1-2-3, and apparently Excel provides it for compatibility purposes. For some reason, Microsoft wants to keep this function a secret. You won't even find the **DATEDIF** function in the Help files, although it's available in all Excel versions. Strangely, **DATEDIF** made an appearance in the Excel 2000 Help files but hasn't been seen since.

DATEDIF is a handy function that calculates the number of days, months, or years between two dates. The function takes three arguments: **start_date**, **end_date**, and a code that represents the time unit of interest.

DATEDIF syntax

=DATEDIF(date1,date2,interval)

- Date1 is the start date
- Date2 is the end date
- Interval is the type of interval you want to calculate e.g. days, months, years.

Here's an example of a formula that uses the **DATEDIF** function (it assumes cells B1 and B2 contain a date). The formula returns the number of complete years between those two dates.

=DATEDIF(B1, B2, "y")

The following table displays valid codes for the third argument. You must enclose the codes in quotation marks.

Unit Code	Returns
"y"	The number of complete years in the period.
"m"	The number of complete months in the period.
"d"	The number of days in the period.
"md"	The difference between the days in **start_date** and **end_date**. The months and years of the dates are ignored.
"ym"	The difference between the months in **start_date** and **end_date**. The days and years of the dates are ignored.
"yd"	The difference between the days in **start_date** and **end_date**. The years of the dates are ignored.

	A	B
1	Start Date	2/9/2009
2	End Date	6/19/2012
3		
4	"y"	3
5	"m"	40
6	"d"	1226
7	"md"	10
8	"ym"	4
9	"yd"	130

Ideas for Using DATEDIF:

- Your age in days, months and years. When you get older this gets harder to keep track of :)
- Length of service of an employee.
- Equipment age.
- Countdown to a date.

DATEDIF Errors

1. If Date 1 is later than Date 2 Excel will return a #NUM error.
2. If Date 1 or Date 2 is not a valid date you will get a #VALUE error.
3. If the interval is not one of the above options Excel will return a #NUM error.

Fun # 1:

Years since Queen Elizabeth II ascended the throne:

=DATEDIF("6/2/1952",TODAY(),"Y")

= 60

Note: in the above formula TODAY() = 6th June 2012. The TODAY() function will return today's date as per your computer clock. Also handy for report headers and the like.

Fun # 2:

Queen Elizabeth's age today (6th June 2012) in days, months and years:

=DATEDIF("21/04/1926",TODAY(),"y")&" years, "&DATEDIF("21/04/1926",TODAY(),"ym")&" month(s), "&DATEDIF("21/04/1926",TODAY(),"md")&" Days"

= 86 years, 1 month(s), 16 Days

The above formula uses the **concatenation** technique to join text and numbers together.

Fun # 3:

Calculate how long until my next holiday.

Suppressing 0 values where there are no years or months returned:

="Only "&IF(DATEDIF(TODAY(),"17/03/2013","y")=0,"",DATEDIF(TODAY(),"17/03/2013","y")&" years ")&IF(DATEDIF(TODAY(),"17/03/2013","ym")=0,"",DATEDIF(TODAY(),"17/03/2013","ym")&" months ")&DATEDIF(TODAY(),"17/03/2013","md")&" days"

= Only 9 months 11 days

This technique uses an **IF function** to first evaluate whether there are any years to count, if not return nothing (as stipulated by the empty double quotes ""), and so on for months and days.