Title

> **Dates —** Date and time functions

Contents

[M-5] Manual entry	Function	Purpose

	Dates	

[date( )](#), *continued*

dofb()	%td of %tb
bofd()	%tb of %td
month()	month of %td
day()	day-of-month of %td
year()	year of %td
dow()	day-of-week of %td
week()	week of %td
quarter()	quarter of %td
halfyear()	half-of-year of %td
doy()	day-of-year of %td
yearly()	%ty of string
yofd()	%ty of %td
dofy()	%td of %ty
halfyearly()	%th of string
hofd()	%th of %td
dofh()	%td of %th
quarterly()	%tq of string
qofd()	%tq of %td
dofq()	%td of %tq
monthly()	%tm of string
mofd()	%tm of %td
dofm()	%td of %tm
weekly()	%tw of string
wofd()	%tw of %td
dofw()	%td of %tw
hours()	hours of milliseconds
minutes()	minutes of milliseconds
seconds()	seconds of milliseconds
msofhours()	milliseconds of hours
msofminutes()	milliseconds of minutes
msofseconds()	milliseconds of seconds
age()	integer age on %td
age_frac()	age on %td with fractional part
Clockdiff()	integer %tC difference
clockdiff()	integer %tc difference
Clockdiff_frac()	%tC difference with fractional part
clockdiff_frac()	%tc difference with fractional part
datediff()	integer %td difference
datediff_frac()	%td difference with fractional part

date(), *continued*	birthday()	%td birthday in year
	previousbirthday()	%td birthday immediately before %td
	nextbirthday()	%td first birthday after %td
	isleapyear()	1 if leap year; 0 otherwise
	previousleapyear()	leap year immediately before year
	nextleapyear()	first leap year after year
	daysinmonth()	number of days in month of %td
	firstdayofmonth()	%td first day of month of %td
	lastdayofmonth()	%td last day of month of %td
	datepart()	part of %td corresponding to time unit
	clockpart()	part of %tc corresponding to time unit
	Clockpart()	part of %tC corresponding to time unit
	isleapsecond()	1 if %tC is leap second; 0 otherwise
	today()	%td today's date
	now()	%tc current datetime
	dayssinceweekday(), dayssincedow()	number of days since previous day of week
	daysuntilweekday(), daysuntildow()	number of days until next day of week
	firstweekdayofmonth(), firstdowofmonth()	%td of first day of week of month and year
	lastweekdayofmonth(), lastdowofmonth()	%td of last day of week of month and year
	previousweekday(), previousdow()	%td of last day of week before %td
	nextweekday(), nextdow()	%td of next day of week after %td

Description

The above functions allow you to work with dates and times in Mata. They are what most people would consider scalar functions, although in fact they will work with matrices, in an element-by-element fashion.

Also see

[M-4] **Intro** — Categorical guide to Mata functions