

DATES in SAS, an example of Calculating Age From Dates¹

If you have the variables Year of birth, Month of Birth and Day of birth, and know the date of an interview, it is possible to calculate age. SAS has a number of date (and other) functions. The function “**MDY**” can be used to create a **number** from a YEAR, MONTH, and DAY. This number is the number of days since January 1, 1960. Once dates are converted into days, they can be subtracted from other dates that have been changed into days, and months, years, weeks, etc., can be calculated. The following example demonstrates this.

```
* datesas.sas ;
title1 'datesas.sas - Show how to add and subtract dates' ;

data ONE; input mb db yb mi di yi ;
label
mb = 'Month of birth'
db = 'Day of birth'
yb = 'Day of birth'
mi = 'Month of interview'
di = 'Day of interview'
yi = 'Year of interview' ;

* use MDY function to create a number for Interview date. ;
idate = mdy(mi,di,yi) ;
* use MDY function to create a number for birth date. ;
bdate = mdy(mb,db,yb) ;

* Subtract birth date from interview date to calculate age at interview ;
ageint = idate - bdate ;
ageint2 = ageint / 365.25 ;
ageint3 = int(ageint / 365.25) ;
label
ageint = 'Age at interview (days)'
ageint2 = 'Age at interview (years)'
ageint3 = 'Age at interview int(years)';
datalines ;
1 1 1960 3 7 2001
1 2 1950 3 3 2001
2 4 1974 3 4 2001
4 4 1944 3 5 2001
;
proc print;
format ageint2 6.2 ;

run ;
```

datesas.sas - Show how to add and subtract dates

Obs	mb	db	yb	mi	di	yi	idate	bdate	ageint	ageint2	ageint3
1	1	1	1960	3	7	2001	15041	0	15041	41.18	41
2	1	2	1950	3	3	2001	15037	-3651	18688	51.16	51
3	2	4	1974	3	4	2001	15038	5148	9890	27.08	27
4	4	4	1944	3	5	2001	15039	-5750	20789	56.92	56

¹Prepared by Patty Glynn, University of Washington. May 9, 2001, updated 6/16/02. C:\all\help\helpnew\datesas.wpd