

Calculating the day of the week for any year

Here is a standard method suitable for mentally computing the day of the week from the date:

1. Take the last two digits of the year.
2. Divide by 4, discarding any fraction.
3. Add the day of the month.
4. Add the month's key value: JFM AMJ JAS OND
144 025 036 146
5. Subtract 1 for January or February of a leap year.
6. For a Gregorian date, add 0 for 1900's, 6 for 2000's, 4 for 1700's, 2 for 1800's; for other years, add or subtract multiples of 400.
7. For a Julian date, add 1 for 1700's, and 1 for every additional century you go back.
8. Add the last two digits of the year.
9. Divide by 7 and take the remainder.

Now 1 is Sunday, the first day of the week, 2 is Monday, and so on.

A good mnemonic rule to help on the computation of the day of the week is as follows. In any given year the following days come on the same day of the week:

4/4
6/6
8/8
10/10
12/12

To remember the next four, remember that I work from 9-5 at a 7-11 so

9/5
5/9
7/11
11/7
and the last day of Feb.

In 1996, these dates all fall on a Thursday. To find the day that the 4th of July falls on, for example, use the fact that 11/7 is a Thursday, and hence the 4/7 is also (Note to US citizens - in Australia we use day/month.)