

The Calendar Cipher

Find the weekday of any date with four small sums and a remainder.

HOW IT WORKS

A

Year Key

Take the last two digits of the year. Divide by 4, drop the remainder, and add it back.

A = YY + [YY ÷ 4]

B

Month Key

Every month has a fixed key. Jan and Feb drop by one in a leap year.

JAN 6 leap 5	FEB 2 leap 1	MAR 2	APR 5	MAY 0	JUN 3
JUL 5	AUG 1	SEP 4	OCT 6	NOV 2	DEC 4

C

Day Key

No arithmetic: the day of the month is its own key.

C = day of month

D

Century Key

Set by the century the year falls in.

CENTURY	KEY
1800s	+2
1900s	+1
2000s	+0
2100s	+5

Σ

Decode

Add the four keys and divide by 7. The remainder points to the weekday below.

Total = A + B + C + D
Weekday = Total mod 7

Tip: you can divide by 7 and keep just the remainder at any point along the way, not only at the end, to keep the numbers small.

0	1	2	3	4	5	6
SUN	MON	TUE	WED	THU	FRI	SAT

WORKED EXAMPLE: FRIDAY, MAY 14, 2004

A	Year: 4 + [4÷4]	5
B	Month: May	0
C	Day: 14th	14
D	Century: 2000s	0
Σ	Total	19
%	19 ÷ 7 = 2 remainder 5	Friday

POCKET REFERENCE

MONTH KEYS		CENTURY & WEEKDAY	
Jan / Feb	6 / 2 (Leap 5 / 1)	1800s / 1900s	+2 / +1
Mar / Apr	2 / 5	2000s / 2100s	+0 / +5
May / Jun	0 / 3	Remainder 0–3	Sun Mon Tue Wed
Jul / Aug	5 / 1	Remainder 4–6	Thu Fri Sat
Sep / Oct	4 / 6		
Nov / Dec	2 / 4		