

Calendar

2 types of year.

Normal - 365 days

Leap - 366 days

$$\frac{365}{7} = 52 \text{ weeks} + 1 \text{ day (odd day)}$$

Week Start and end a day

Wednesday - Tuesday

for a normal year

It starts and ends in same day

Leap year

366 days 52 weeks 2 odd days

for leap year

Wed ... Tue ... Tue + 1 & 1

for checking
 leap year or not

Divide by 4 for non century year

1756 - ✓

1832 ✓

Divide by 400 for century year

1600 - ✓

1700 - ✗

leap year doesn't come after
 4 years

4 years

$$\frac{1896}{4} \checkmark - \frac{1900}{400} \times - \frac{1904}{4} \checkmark$$

how many leap years in 100 years

	leap years	Normal
100 years	24	76
200	48	152
300	72	228
400	97	303

odd days

10 day \rightarrow 1 week + 3 odd days

for Jan \rightarrow 31 - 7 weeks + 3 day

Remainder or odd days can only

be 0, 1, 2, 3, 4, 5, 6

$$\begin{array}{r} 1 \\ 7 \overline{) 10} \\ \underline{7} \\ 3 \end{array}$$

$$\begin{array}{r} 1 \\ 7 \overline{) 31} \\ \underline{28} \\ 3 \end{array}$$

odd Centuries

5 - 1000

3 - 200

1 - 300

0 - 400

1000 - 200 - 300 = 500

500

2F

AS

231

8A

130

5F

205

4P