

Calender

Calenders:

Odd-days:

→ The no. of extra days that are present when divisible by 7.

Jan - 3 (31)

Feb - 0 (NLP) / 1 (LP)

Mar - 3 (31)

Apr - 2 (30)

May - 3 (31)

June - 2 (30)

July - 3 (31)

Aug - 3 (31)

Sep - 2 (30)

Oct - 3 (31)

Nov - 2 (30)

Dec - 3 (31)

1) Non-Leap year = $\frac{365}{7} = 1$ (extra)

2) Leap year = $\frac{366}{7} = 2$ (extra)

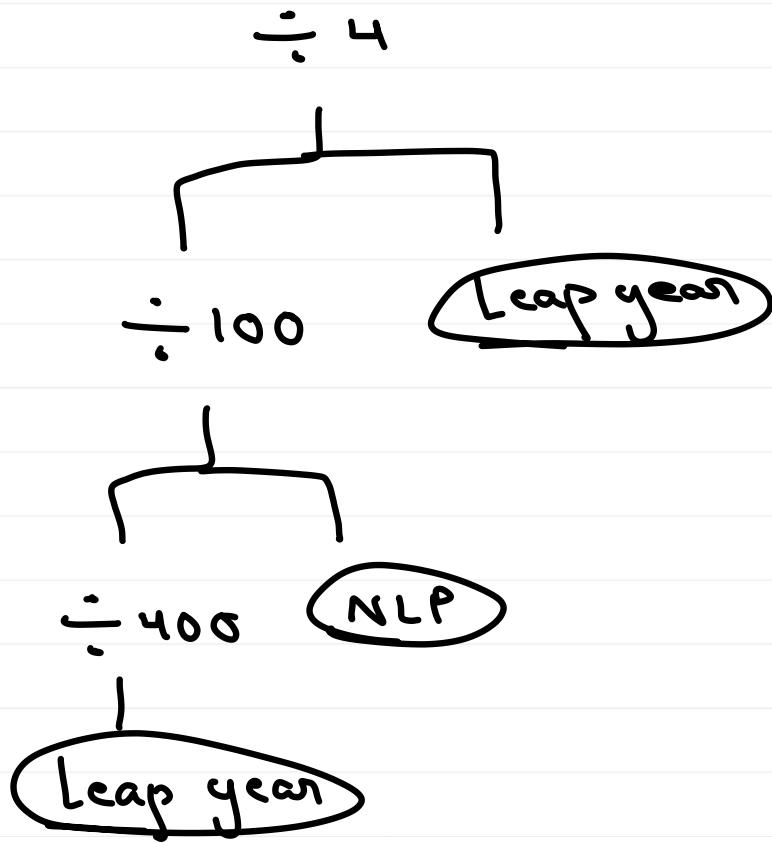
old days

Leap year:-

1 Earth year = 365 Days 5 hrs 48 min 48 sec

$6 \text{ hr} \times 4 = 24 \text{ hrs} = 1 \text{ day}$

Rules:



→ For every 100 years,

$$\text{odd days} = 76 \text{ nlp} + 24 \text{ lp}$$

$$= (76 \times 1) + (24 \times 2)$$

$$= 76 + 48$$

$$= 124 / 7$$

(÷ by 7)

+400

$$= 5 \text{ odd days.}$$

→ 100 years = 5 odd days = 500, 900, 1300 - -

→ 200 years = 3 odd days = 600, 1000, 1400 - -

→ 300 years = 1 odd days = 700, 1100, 1500 - -

→ 400 years = 0 odd days = 800, 1200, 1600 - -

(* For 200 years we do $(5 + 5) \% 7 = 3$ odd days)

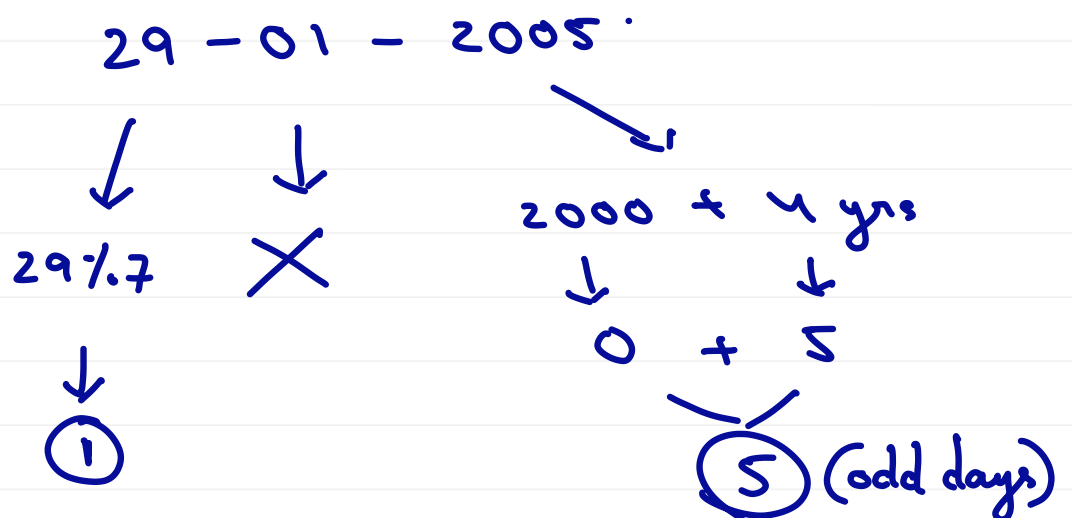
\Rightarrow Days of week \longleftrightarrow odd days

Sunday	— 0	} odd days
Monday	— 1	
Tuesday	— 2	
Wednesday	— 3	
Thursday	— 4	
Friday	— 5	
Saturday	— 6	

☆ Model 1:

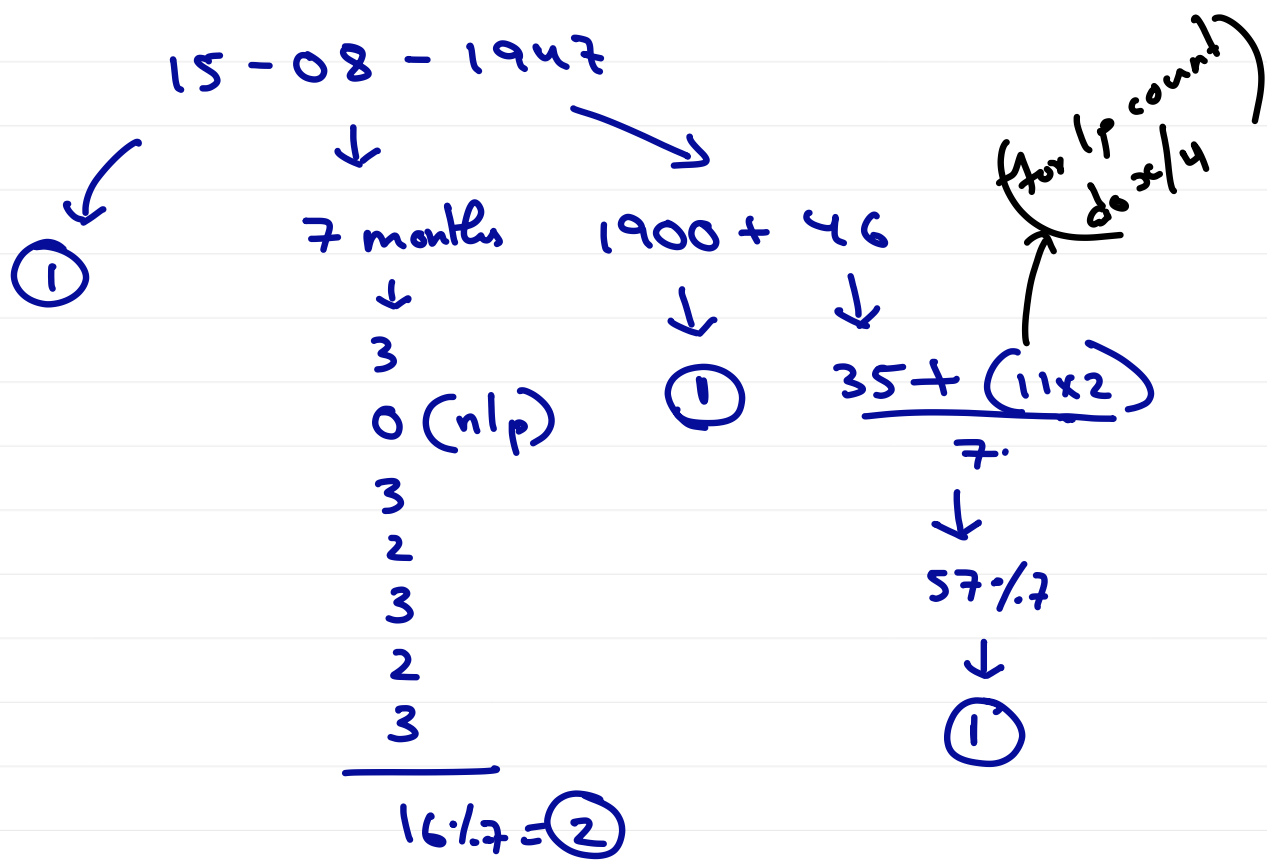
Day on a Particular Date:

Q) 29-01-2005.



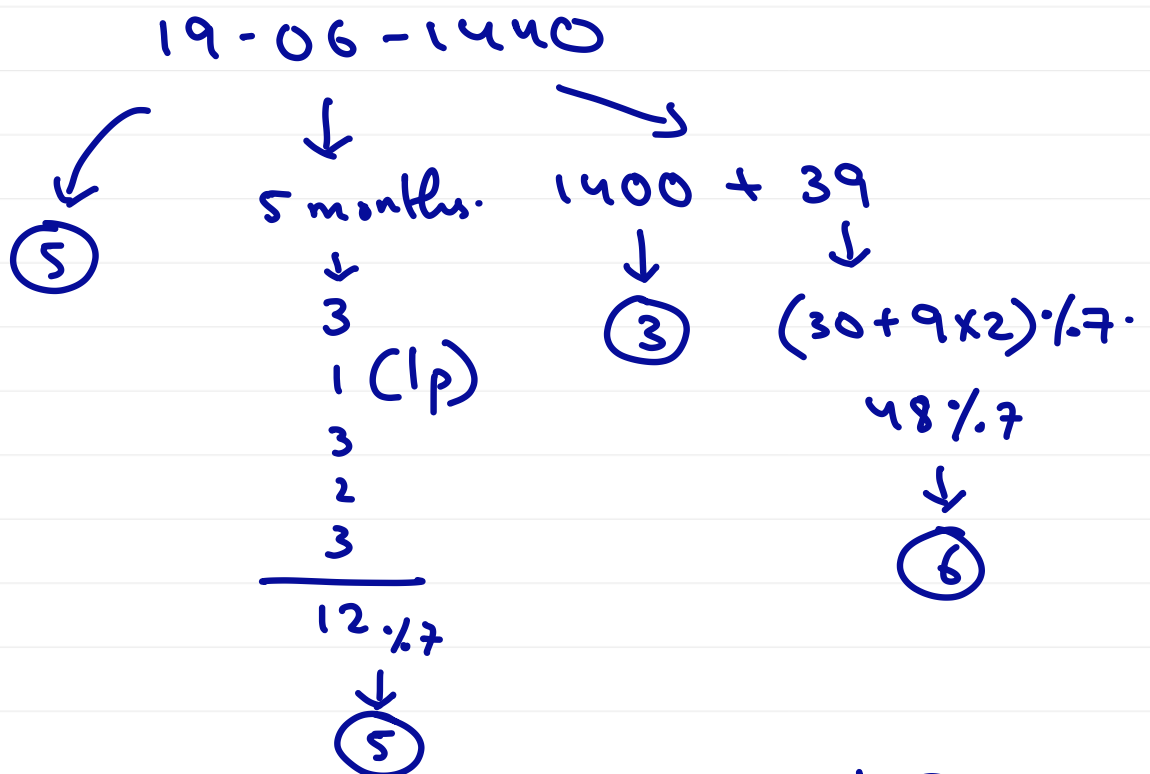
$\Rightarrow 1+5 \Rightarrow 6$ (Saturday)

Q) 15-08-1947.



$$\Rightarrow 1 + 2 + 1 + 1 = 5 \text{ (Friday)}$$

Q) 19-06-1440



$$\Rightarrow 5 + 5 + 3 + 6 \Rightarrow 19 \div 7 = 5 \text{ (Friday)}$$

2 Imp things to remember when doing ↑ questions.

1) when year is given as 1440 calc odd days for 1439 years same goes for months

2) Check whether given year is lp year or not to keep 0 odd days or 1 odd days for feb month.

————— X —————

⇒ Last days of Century years:

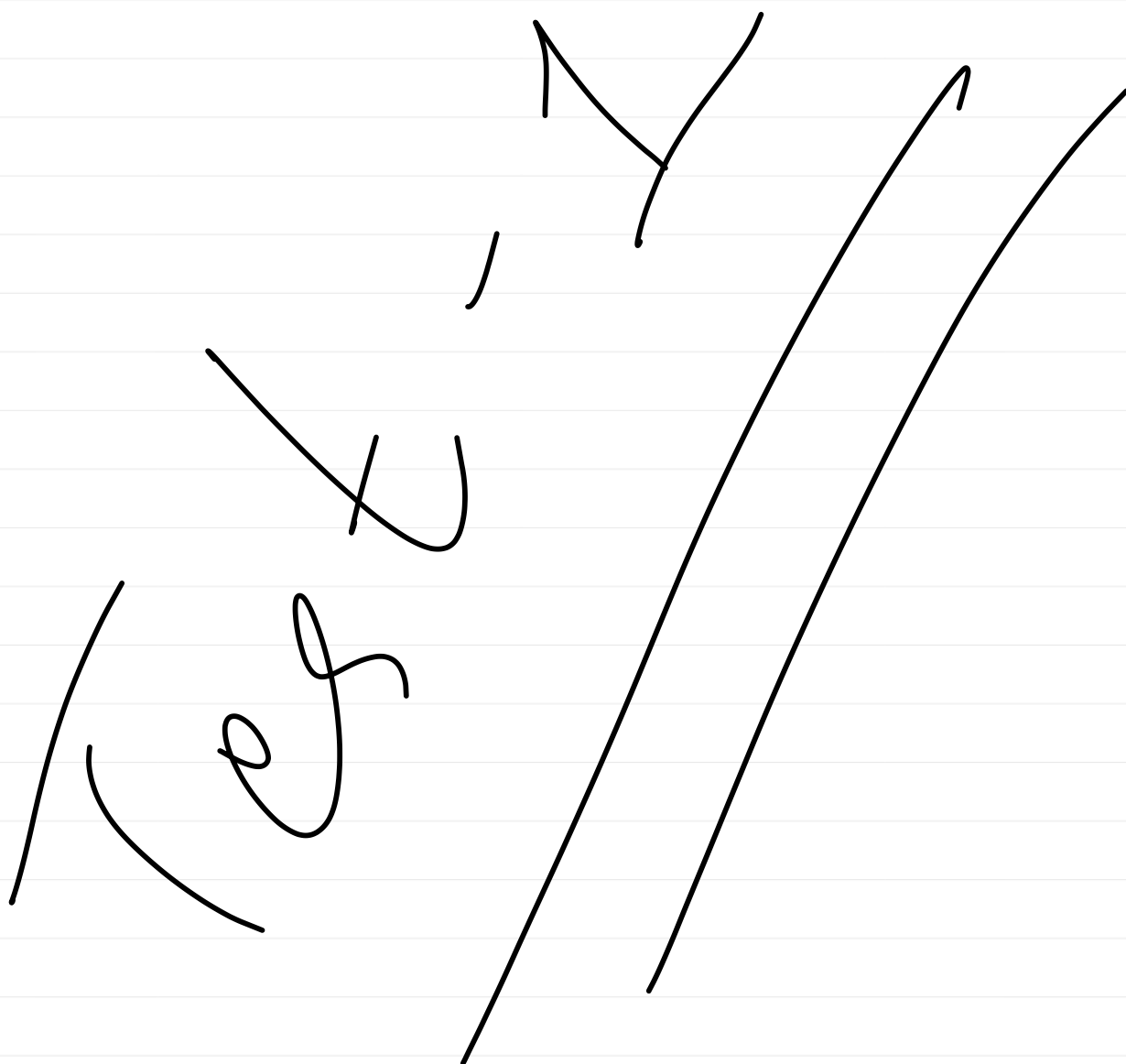
100 yr's	- 5	(Fri)
200 yr's	- 3	(Wed)
300 yr's	- 1	(Mon)
400 yr's	- 0	(Sun)

→ Tue, Thu, Sat are not last days of century years.

⇒ Same Calendar year:

lp	$\xrightarrow{+28}$
lp+1	$\xrightarrow{+6}$
lp+2	$\xrightarrow{+11}$
lp+3	$\xrightarrow{+11}$

} Only works when there are consistent leap years in b/w.





1/2/21