

Calendar केलेंडर



did you know?

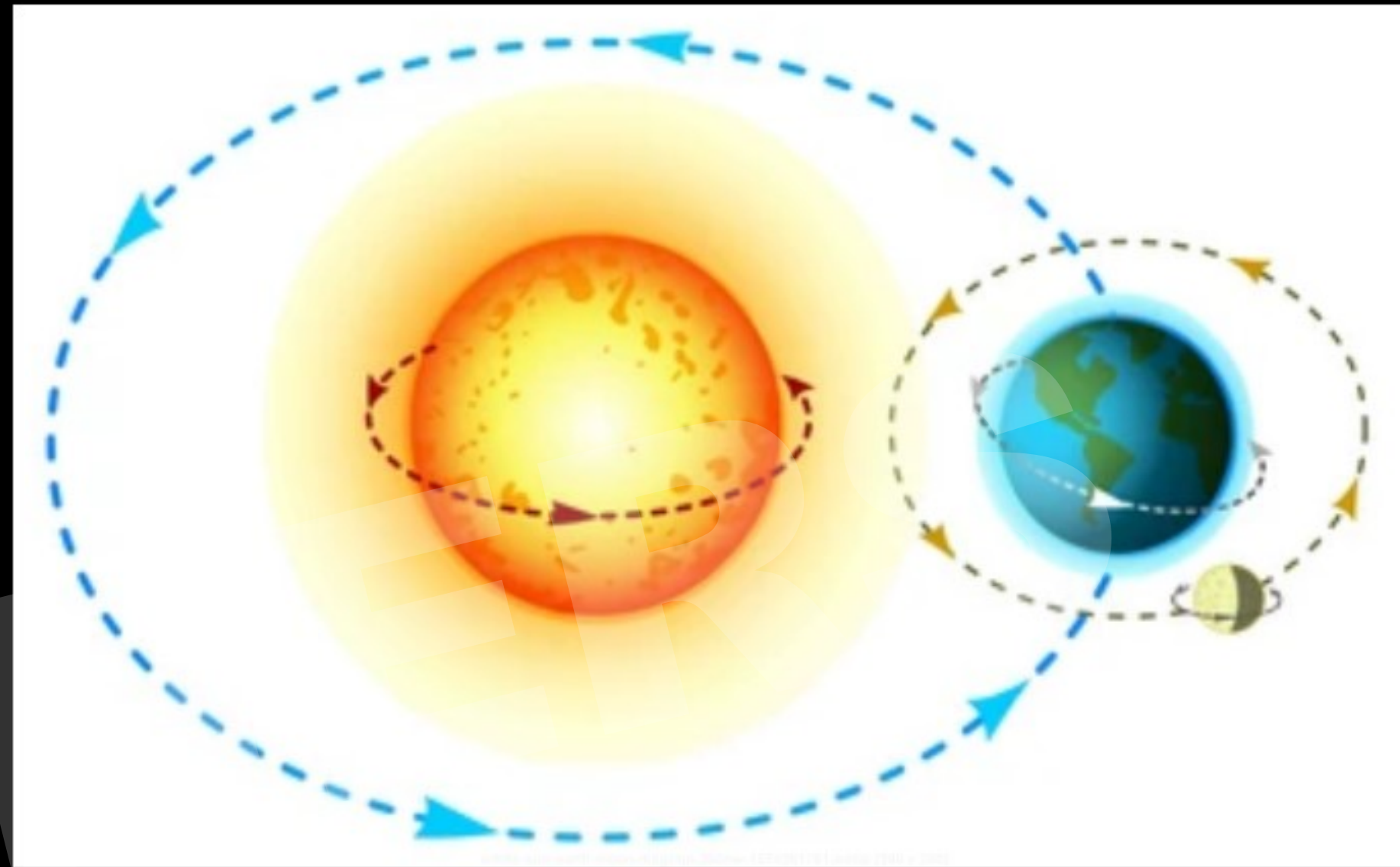
We need leap years because it takes Earth 365 days, 5 hours, 48 minutes and 46 seconds to orbit the sun, causing the calendar year to become more and more out of sync with the solar year over time. If we didn't have leap days, February 2016 would actually be July 2017.



जूलियन ✕

1600

प्रेशेंट ग्रेगोरियन कैलेंडर =



365 days, 5 h, 48 min, 46 sec.

| <div>वर्ष (years)</div> <div>365 days ↙</div> <div>साधारण वर्ष</div> <div>Normal year</div> | <div>366 days ↘</div> <div>अधिर्वर्ष</div> <div>Leap year</div> | <div>c.y.</div> <div>1600</div> <div>1700</div> <div>1800</div> <div>1900</div> <div>2000</div> <div>2100</div> <div>2200</div> <div>1600</div> |
|---|---|---|
| 1957, 1989 | वर्ष ÷ 4 ⇒ L.y. | |
| 1900, 1857 | शताब्दी वर्ष (c.y.) ÷ 400 = L.y. | |
| 1999, 2009 | 2004, 1996, 2024, 1896, 1600, 2000 | |

365 days, 5 hrs, 48 min, 45.25 sec

लगभग = 6 h.

1601 \Rightarrow 365 days, 6 h.

1602 = 365 days, 6 h.

1603 = 365 days, 6 h.

1604 = 365 days, 6 h.
+ 1 day

366 days

Leap year $\Rightarrow \times 4$

$\div 4$

24 h. \approx 1 day

365 days, 6 h., 00 min, 00 min

365 days, 5 h., 48 min, 46 sec.

1600 ✓

1700 ✗

1800 ✗

1900 ✗

2000 ✓

2100 ✗

2200 ✗

2300 ✗

1696 L.Y. ✓

1700 L.Y. ✗

365

2400 ✓

11 min, 14 sec.

$$\times 100 y = +18 h. (-24)$$

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$$\begin{aligned} 400 y &= +1 \text{ days} \\ 6 h \times 4 &= -24 \end{aligned}$$



Reasoning by Aditya Sir

रामन

1 March \rightarrow 28 feb + 1 day

29 feb

★

100 years = ? L.Y.

$$\frac{100}{4} = 25$$

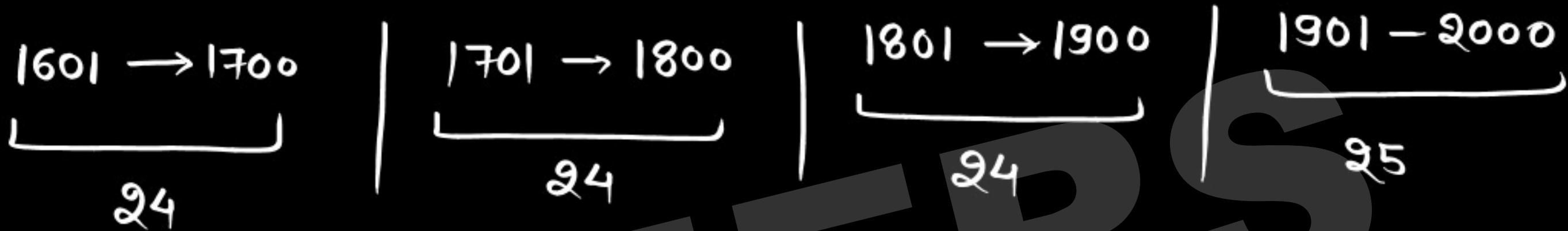
✓ 24 y L.Y.

76 N.Y.

25 y
24 y
1604, 1608, 1612, ..., 1696, 1700 X

1904, 1908, ..., 2000
25 y

$$400 \text{ yrs} = \text{L.y.} = ?$$



$$400 \begin{cases} \rightarrow \text{L.y.} \Rightarrow 97 \text{ y} \\ \rightarrow \text{N.y.} \Rightarrow 303 \text{ y} \end{cases}$$

$$1 \text{ y.} = 365 \text{ days}$$

$$\begin{cases} 1 = \text{Mon.} \\ 7 = \text{Sun} \\ 8 = \text{Mon.} \end{cases}$$

$$\begin{array}{r} 7 \overline{) 365} \quad (52 \\ \underline{35} \\ 15 \\ \underline{14} \\ 1 \end{array}$$

Reasoning by Aditya Sir

★

N.Y.
Same

{ 1-Jan-2023 = Sunday
31-Dec-2023 = Sunday

N.Y.

{ 1-Jan-2023 = Sunday
1-Jan-2024 = Monday $\leftarrow +1$

{ Same date $\Rightarrow +1$

{ Same date $\Rightarrow +2$
29th feb.

$\begin{array}{c} +1 \\ \hline +1 \quad +1 \\ \hline = 2 \end{array}$

1-Jan-2024 = Monday

31-Dec-2024 = Tuesday

15-Feb-2024 = Wed.

15-Feb-2025 = Friday $\leftarrow +2$

30-Mar-2024 = Sat.

30-Mar-2025 = Sunday \leftarrow

Reasoning by Aditya Sir

Date → Day ✓

Concept - 1

तारिख का वार ज्ञात करना।

Formula:- $\frac{\text{दिन} + \text{वर्ष} + \text{लीप वर्ष} + \text{शताब्दी} + \text{माह कोड}}{7}$

| माह कोड | Month | |
|-----------|-------|---|
| January | 1 | 0 |
| February | 4 | 3 |
| March | 4 | 4 |
| April | 0 | 0 |
| May | 2 | 2 |
| June | 5 | 5 |
| July | 0 | 0 |
| August | 3 | 3 |
| September | 6 | 6 |
| October | 1 | 1 |
| November | 4 | 4 |
| December | 6 | 6 |

| Day Code | दिन |
|-----------|-----|
| Sunday | → 1 |
| Monday | → 2 |
| Tuesday | → 3 |
| Wednesday | → 4 |
| Thursday | → 5 |
| Friday | → 6 |
| Saturday | → 0 |

| शताब्दी कोड | |
|-------------|-----|
| 1600 | 6 |
| 1700 | 4 |
| 1800 | 2 |
| 1900 | → 0 |
| 2000 | 6 |
| 2100 | 4 |
| 2200 | 2 |

1600
↓
6420

$$\frac{47}{4} = 11$$

$$\frac{\text{Day} + \text{month} + \text{year} + \text{L.Y.} + \text{C.Y.}}{7}$$

$$\frac{15 + 3 + 47 + 11 + 0}{7}$$

$$1 + 3 + 5 + 4$$

$$\frac{13}{7} = \underline{\underline{6}} \xrightarrow{\text{शुक्र. (R)}} \text{friday}$$

1900 47 ✓
15 - Aug - 1947
 Day = ?

$$\frac{23}{4}$$

11-feb-2023

2000 23

Day = ?

Day + month + year + L1 + cy

$$11 + 4 + 23 + 5 + 6$$

7

$$4 + 4 + 2 + 5 + 6 = \frac{21}{7} = 0 \rightarrow \text{Saturday}$$