



Class-5

Subject-Mathematics

Chapter-12 (Time)

Lecture- 01

Calendar: A chart or series of pages showing the days, weeks, and months of a particular year, or giving particular seasonal information.

Bangla Calendar

| | Month | Number of Days |
|----|--------------|-----------------------|
| 1 | Baishakh | 31 |
| 2 | Jaisthya | 31 |
| 3 | Ashar | 31 |
| 4 | Shrabon | 31 |
| 5 | Bhadra | 31 |
| 6 | Ashwin | 30 |
| 7 | Karyik | 30 |
| 8 | Agrahyon | 30 |
| 9 | Paush | 30 |
| 10 | Mugh | 30 |
| 11 | Falgun | 30 |
| 12 | Chaitra | 30 |

****The first five months of Bangla year will have 31 days, and the last of the year will have 30 days.**

English Calendar

| | Month | Number of Days |
|----|-----------|----------------|
| 1 | January | 31 |
| 2 | February | 28 |
| 3 | March | 31 |
| 4 | April | 30 |
| 5 | May | 31 |
| 6 | June | 30 |
| 7 | July | 31 |
| 8 | August | 31 |
| 9 | September | 30 |
| 10 | October | 31 |
| 11 | November | 30 |
| 12 | December | 31 |

Example 1: Tamim's birthday is 28th May. Taslima's birthday is 8 days after Tamim's birthday, when is her birthday?

Solution:

Here, $28 + 8 = 36$

We know, May has 31 days.

\therefore Taslima's birthday = $36 - 31 = 5$ June

Ans: 5 June.

Example 2: What is the day of week that is 35 days after March 3, Thursday?

Solution: Thursday.

We know, 1 week = 7 days

$$\begin{array}{r} 5 \\ 7 \overline{) 35} \\ \underline{35} \\ 0 \end{array}$$

Since remainder 0 so the day will be same.

Example 3: What is the day of week that is 50 days before April 1, Friday?

Solution: Thursday.

We know, 1 week = 7 days

$$\begin{array}{r} 7 \\ 7 \overline{) 50} \\ \underline{49} \\ 1 \end{array}$$

Since remainder 1 so one day before Friday is Thursday.

Example 4: What is the date that is 20 days after Baishakh 25?

Solution: 14 Jaistha

We know, Baishakh has 31 days.

Remaining days of Baishakh = $31 - 25 = 6$ days

Now the date is = $20 - 6 = 14$

Month after Baishakh is Jaistha.

So the date will be 14 Jaistha

Example 5: When May 3 is Tuesday, what day of week is May 31?

Solution: Tuesday.

After 3rd May, remaining days = $31 - 3 = 28$

$$\begin{array}{r} 4 \\ 7 \overline{) 28} \\ \underline{28} \\ 0 \end{array}$$

Since remainder 0 so the day will be same.

Leap Year –

➡ A leap year is a year containing 366 days.

➡ In leap year, February has 29 days that is 1 day more than 28 days in other years, and so the number of days in a year becomes 366.

Finding leap year –

➡ A year is a leap year if it is divisible by 4.

➡ The years that the tens and ones places are both 0 are not leap years unless they are divisible by 400.

Example 6: How many days were there in February of the following years?

1) 2012, 2) 2000

Solution:

$$\begin{array}{r} 1) \qquad 503 \\ 4 \overline{) 2012} \\ \underline{20} \\ 1 \\ \underline{0} \\ 12 \\ \underline{12} \\ 0 \end{array}$$

Since there is no remainder.

∴ 2012 is a leap year.

$$\begin{array}{r} 2) \qquad 5 \\ 400 \overline{) 2000} \\ \underline{2000} \\ 0 \end{array}$$

Since there is no remainder.

∴ 2000 is a leap year.

Decade: A period of 10 consecutive years is a decade.

Era: A period of 12 consecutive years is an era.

Century: A period of 100 consecutive years is a century.

| Year → | Century |
|---------------|--------------------------|
| 1 – 100 | 1 st Century |
| 101 – 200 | 2 nd Century |
| 201 – 300 | 3 rd Century |
| 301 – 400 | 4 th Century |
| 401 – 500 | 5 th Century |
| 501 – 600 | 6 th Century |
| 601 – 700 | 7 th Century |
| 701 – 800 | 8 th Century |
| 801 – 900 | 9 th Century |
| 901 – 1000 | 10 th Century |
| 1001 – 1100 | 11 th Century |
| 1101 – 1200 | 12 th Century |
| 1201 – 1300 | 13 th Century |
| 1301 – 1400 | 14 th Century |
| 1401 – 1500 | 15 th Century |
| 1501 – 1600 | 16 th Century |

| | |
|-------------|--------------------------|
| 1601 – 1700 | 17 th Century |
| 1701 – 1800 | 18 th Century |
| 1801 – 1900 | 19 th Century |
| 1901 – 2000 | 20 th Century |
| 2001 - 2100 | 21 st Century |

** The 1st century started in the year 1, which was more than 2000 years ago. We are now in 21st century, which was started in the year 2001.

Example 7: What number century was 1945?

Solution: The years of 1945 was in the 20th century.

Exercise

1. What is the day of week that is 21 days after February 13, Saturday?
2. January 1 of the year 2018 was Monday. What day of week was 40 days after January 1?
3. What is the date that is 49 days after June 25?
4. When October 1 is Saturday, what day of week is October 31?
5. How many days were there in February of the following years?
a) 1800, b) 1900, c) 2000, d) 1918, e) 1984, f) 1820
6. What number century was each of the following years?
a) 1945, b) 1300, c) 1899, d) 108, e) 1015, f) 2001