

What is Leap Year and How Many Days Do you Have in a Leap Year?

A leap year has a total of 366 days instead of the usual 365 as a result of adding an extra day (February 29) to the Gregorian Calendar which is the calendar currently used by most modern societies. This calendar was introduced in 1582, to replace the flawed Julian Calendar.

How to Know if Certain Year is a Leap Year

The 3 conditions for a given year be a leap year are:

1. The year is exactly divisible by four (with no remainder);
2. If the year is divisible by 100 (years ending in two zeros), it is not a leap, except if
3. It is also divisible by 400 (in this case it will be a leap year).

Examples:

Was 2000 a leap year?

- 2000 is divisible 4 ($2000/4 = 500$). Therefore, it could be a leap year.
- 2000 is divisible by 100 ($2000/100 = 20$). So, it could not have been a leap year, but
- 2000 is divisible 400 ($2000/400 = 5$). So, we conclude that 2000 was a leap year.

Will 2020 be a leap year?

- 2020 is divisible 4 ($= 505$). So it could be a leap year
- 2020 is not divisible by 100 ($= 20.2$), so it will be a leap year. (It is not necessary to check the third condition)

Will 2018 be leap year?

- 2018 is not divisible 4 ($= 504.5$), so it will not be a leap year (it is not necessary to check the next two conditions).

The year being divisible by 4 is a necessary condition, but not sufficient for a year to be leap, but for this century, we may consider sufficient until the year 2098. For this century, it is not necessary to check the other conditions. So, we can confidently say that: "until 2096, if we want to know if a given year is leap or not, we just need to check if that year is or is not divisible by 4. So, any year divisible by four is a leap year! (for this century).

The leap year system makes the calendar coincide with the cycle of the seasons.