

MAGIC DAY CALCULATOR ADVENTURE!

Hi there, little friend!

I will help you find out what day of the week any date falls on!

A challenge in 7 steps... Here we go!



1. Take the last 2 digits of the year.

For example, if the year is 2023, just take 23. Easy, right?

2. Divide the year number by 4, without the remainder, and add it.

If your year number is 23, do $23/4$ which is 5 (forget about the remainder!). Add it to 23 and you get 28. You're doing great!

3. Add the "Century Correction"

Look at the century you're in and use this chart:

1500:	0
1600:	6
1700:	4
1800:	2
1900:	0
2000:	-1

If your year is 2023, you're in the 2000s, so the century correction is -1. So $28-1=27$. Keep going!

4. Add the "Month Coefficient"

Each month has a number you need to remember:

January:	1 (0 if leap year)
February:	4 (3 if leap year)
March:	4
April:	0
May:	2
June:	5
July:	0
August:	3
September:	6
October:	1
November:	4
December:	6

If your date is August 19, 2023, the month coefficient is 3. So $27+3=30$. You're almost there! 🐾🐾

5. Add the day of the month.

If your date is August 19, 2023, the day of the month is 19.
 $30 + 19 = 49$

Good job!

Recap: you just added those numbers up like a pro!

$$YY + YY/4 + CC + MC + D$$
$$23 + 5 - 1 + 3 + 19 = 49$$

6. Divide the sum by 7 and find the remainder:

$$49 \div 7 = 7 \text{ with remainder } 0$$

You're doing some fancy math now, but I believe in you!

7. Look at the remainder and find the day of the week:

- 0: Saturday
- 1: Sunday
- 2: Monday
- 3: Tuesday
- 4: Wednesday
- 5: Thursday
- 6: Friday

If your remainder is 0, the day of the week is Saturday.

There you have it, my friend! The 19th of August 2023 is a Saturday!

Little tired? But you did it!!!



You're a real math wizard now,
and I'm so proud of you!

