

2023

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1 Curiosities about the number

Here you are some curiosities about the number 2023 (non-exhaustive, if anyone knows something else, write me and I will add it!):

$7 \times 17^2 = 2023$

2023: MMXXIII

Binary: $2023 = 11111100111$

Octal: 3747

Hexadecimal: 7e7

Beautiful decomposition: $5^2 + 6^2 + 7^2 + 8^2 + 43^2 = 5^2 + 7^2 + 10^2 + 43^2 = 2023$

Beautiful decomposition(II): $2^3 + 5^3 + 6^3 + 7^3 + 11^3 = 2023$

Beautiful decomposition(III): $2023 = (2+0+2+3)(2^2+0^2+2^2+3^2)^2$

Beautiful decomposition(IV): $2023 = -1^3 + 2^3 + 3^3 + 4^3 + 5^3 + 6^3 + 7^3 + 8^3 + 9^3$

Modular arithmetics: $2023 = 7^7 \pmod{7!}$

Number of divisors: 6.

List of divisors for 2023: 1, 7, 17, 119, 289, 2023

Base-36: 1K7

2023 is a Harshad number. A Harshad number (also called a Niven number) is one that is divisible by the sum of its digits. A common example is the devil's number 666, which is divisible by $6+6+6=18$.

The number of digits of 2023 is 4.

The sum of the digits of 2023 is 7: $2+0+2+3=7$.

In base 11 it is a number $157a_{11}$, which is a palindromic number.

2023 is a **odious** number, because the sum of its binary digits is odd.

The sum of its prime factors is 41 (or 24 counting only the distinct ones).

The product of its (non-zero) digits is 12, while the sum is 7.

The square root of 2023 is approximately 44.9777722881.

The cube root of 2023 is approximately 12.6473235080.

Adding to 2023 its reverse (3202), we obtain a palindrome (5225).

It can be divided into two parts, 202 and 3, which multiplied together give a palindrome (606).

The spelling of 2023 in words is "two thousand twenty-three", and is therefore an iban number. A number is called iban if its name does not contain the letter "i".

2023 is a Duffinian number (Richard Duffy who introduced them). They are those composite numbers that do not have prime factors in common with the sum of their divisors.

2 Happy New Year to everyone everywhere

Happy New Year 2023, to everyone and everywhere!

Appendix: 2023 in different bases

Binary: 11111100111

Ternary: 2202221

Quaternary: 133213

Quinary: 31043

Senary: 13211

Octal: 3747

Decimal: 2023

Duodecimal: 1207

Hexadecimal: 7e7

Vigesimal: 513

Base36: 1k7

2023 is the year 17:17 (Cl-Cl) expressed in base 118.