162 Decimal Expansion

Irrational number

expressed in positional notation, notably as a decimal number. In the case of irrational numbers, the decimal expansion does not terminate, nor end with a repeating

In mathematics, the irrational numbers are all the real numbers that are not rational numbers. That is, irrational numbers cannot be expressed as the ratio of two integers. When the ratio of lengths of two line segments is an irrational number, the line segments are also described as being incommensurable, meaning that they share no "measure" in common, that is, there is no length ("the measure"), no matter how short, that could be used to express the lengths of both of the two given segments as integer multiples of itself.

Among irrational numbers are the ratio ? of a circle's circumference to its diameter, Euler's number e, the golden ratio ?, and the square root of two. In fact, all square roots of natural numbers, other than of perfect squares, are irrational.

Like all real numbers, irrational...

Binary number

00011... . It may come as a surprise that terminating decimal fractions can have repeating expansions in binary. It is for this reason that many are surprised

A binary number is a number expressed in the base-2 numeral system or binary numeral system, a method for representing numbers that uses only two symbols for the natural numbers: typically "0" (zero) and "1" (one). A binary number may also refer to a rational number that has a finite representation in the binary numeral system, that is, the quotient of an integer by a power of two.

The base-2 numeral system is a positional notation with a radix of 2. Each digit is referred to as a bit, or binary digit. Because of its straightforward implementation in digital electronic circuitry using logic gates, the binary system is used by almost all modern computers and computer-based devices, as a preferred system of use, over various other human techniques of communication, because of the simplicity...

Duodecimal

the number twelve is denoted "10", meaning 1 twelve and 0 units; in the decimal system, this number is instead written as "12" meaning 1 ten and 2 units

The duodecimal system, also known as base twelve or dozenal, is a positional numeral system using twelve as its base. In duodecimal, the number twelve is denoted "10", meaning 1 twelve and 0 units; in the decimal system, this number is instead written as "12" meaning 1 ten and 2 units, and the string "10" means ten. In duodecimal, "100" means twelve squared (144), "1,000" means twelve cubed (1,728), and "0.1" means a twelfth (0.08333...).

Various symbols have been used to stand for ten and eleven in duodecimal notation; this page uses A and B, as in hexadecimal, which make a duodecimal count from zero to twelve read 0, 1, 2, 3, 4, 5, 6, 7, 8, 9, A, B, and finally 10. The Dozenal Societies of America and Great Britain (organisations promoting the use of duodecimal) use turned digits in their...

Computable number

digit of the real number's decimal expansion as output. (The decimal expansion of a only refers to the digits following the decimal point.) Turing was aware

In mathematics, computable numbers are the real numbers that can be computed to within any desired precision by a finite, terminating algorithm. They are also known as the recursive numbers, effective numbers, computable reals, or recursive reals. The concept of a computable real number was introduced by Émile Borel in 1912, using the intuitive notion of computability available at the time.

Equivalent definitions can be given using ?-recursive functions, Turing machines, or ?-calculus as the formal representation of algorithms. The computable numbers form a real closed field and can be used in the place of real numbers for many, but not all, mathematical purposes.

31 (number)

part of the decimal expansion for pi in base-10 is the last consecutive non-zero digit represented, starting from the beginning of the expansion (i.e, the

31 (thirty-one) is the natural number following 30 and preceding 32. It is a prime number.

109 (number)

(-1)^{n+1}=0.00917431\dots } The decimal expansion of 1/109 has 108 digits, making 109 a full reptend prime in decimal. The last six digits of the 108-digit

109 (one hundred [and] nine) is the natural number following 108 and preceding 110.

Lieb's square ice constant

Review. 162 (1): 162. Bibcode:1967PhRv..162..162L. doi:10.1103/PhysRev.162.162. Sloane, N. J. A. (ed.). "Sequence A118273 (Decimal expansion of (4/3)^(3/2))"

Lieb's square ice constant is a mathematical constant used in the field of combinatorics to approximately count Eulerian orientations of grid graphs. It was introduced by Elliott H. Lieb in 1967. It is called the square ice constant because the orientations that it counts arise in statistical mechanics of crystalline structures as the states of an ice-type model on a square grid.

The value of Lieb's square ice constant is

8

3

9

?

1.5396.

{\displaystyle {\frac {8{\sqrt {3}}}{9}}\approx 1.5396.}

Based on this, the number of Eulerian orientations of an...

181 (number)

(ed.). "Sequence A002385 (Palindromic primes: prime numbers whose decimal expansion is a palindrome.)". The On-Line Encyclopedia of Integer Sequences

181 (one hundred [and] eighty-one) is the natural number following 180 and preceding 182.

Hexadecimal

"0" to "9" like for decimal and as a letter of the alphabet from "A" to "F" (either upper or lower case) for the digits with decimal value 10 to 15. As

Hexadecimal (hex for short) is a positional numeral system for representing a numeric value as base 16. For the most common convention, a digit is represented as "0" to "9" like for decimal and as a letter of the alphabet from "A" to "F" (either upper or lower case) for the digits with decimal value 10 to 15.

As typical computer hardware is binary in nature and that hex is power of 2, the hex representation is often used in computing as a dense representation of binary information. A hex digit represents 4 contiguous bits – known as a nibble. An 8-bit byte is two hex digits, such as 2C.

Special notation is often used to indicate that a number is hex. In mathematics, a subscript is typically used to specify the base. For example, the decimal value 491 would be expressed in hex as 1EB16. In computer...

86 (number)

these). It is conjectured that 86 is the largest n for which the decimal expansion of 2n contains no 0. 86 = (8 × 6 = 48) + (4 × 8 = 32) + (3 × 2 = 6)

86 (eighty-six) is the natural number following 85 and preceding 87.