21 Twenty-One XXI

Corresponding ordinal: twenty-first.

The number 21 is the sixth triangular number since $21 = 1 + 2 + 3 + 4 + 5 + 6$ (see the pattern above).

The number 21 is the eleventh odd number and the twelfth composite number.

As a product of primes: $21 = 3 \cdot 7$.

The number 21 has four divisors: 1, 3, 7, 21.

The number 21 is the seventeenth deficient number: $s(21) = 1 + 3 + 7 = 11 < 21$.

As the sum of four or fewer squares: $21 = 1^2 + 2^2 + 4^2 = 2^2 + 2^2 + 2^2 + 3^2$.

As the sum of nine or fewer cubes: $21 = 5 \cdot 1^3 + 2 \cdot 2^3$.

As a difference of two squares: $21 = 5^2 - 2^2 = 11^2 - 10^2$.

The number 21 appears in four Pythagorean triples: [20, 21, 29], [21, 28, 35], [21, 72, 75], [21, 220, 221]. The first and the last are primitive.

As a sum of three odd primes: $21 = 3 + 5 + 13 = 3 + 7 + 11 = 5 + 5 + 11 = 7 + 7 + 7$.

The number $2^{21} - 21$ is prime. (Prime Curios)

The number 1212121212121212121212121212121 (the digits “21” are repeated 21 times) is prime. (Prime Curios)

The number 21 is the smallest number that is the sum of the proper divisors of three different numbers: $s^{-1}(21) = \{18, 51, 91\}$.

The number 21 is the smallest number of integer-sided squares of different sizes that can be put together to form a bigger square. In the smallest example, the edge of the big square has length 112, and the edges of the smaller squares have lengths 2, 4, 6, 7, 8, 9, 11, 15, 16, 17, 18, 19, 24, 25, 27, 29, 33, 35, 37, 42, 50.

The twenty-first President of the United States was Chester Alan Arthur.

The twenty-first state to enter the Union was Illinois.
The twenty-first largest state in the United States is Missouri.


The “age of majority” in many states of the United States used to be 21 years, but a lot of those laws have been changed.

There are 21 spots on a standard cubical die.