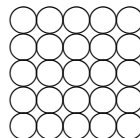


25 Twenty-Five XXV



Corresponding ordinal: twenty-fifth.

The number 25 is the sixth square number since $25 = 5^2$ (see the pattern above).

The number 25 is the thirteenth odd number and the fifteenth composite number.

As a sum of two triangular numbers, $25 = 10 + 15$.

As a product of primes: $25 = 5^2$.

The number 25 has three divisors: 1, 5, 25.

The number 25 is the twentieth deficient number: $1 + 5 = 6 < 25$.

As the sum of four or fewer squares: $25 = 5^2 = 3^2 + 4^2 = 1^2 + 2^2 + 2^2 + 4^2$.

As the sum of nine or fewer cubes: $25 = 1^3 + 2^3 + 2^3 + 2^3$.

As the difference of two squares: $25 = 13^2 - 12^2$.

The number 25 appears in four Pythagorean triples: $[7, 24, 25]$, $[15, 20, 25]$, $[25, 60, 65]$, $[25, 312, 313]$. The first and the last are primitive.

As a sum of three odd primes: $25 = 3 + 3 + 19 = 3 + 5 + 17 = 3 + 11 + 11 = 5 + 7 + 13 = 7 + 7 + 11$.

The number 25 is the only square of a prime whose digits are all primes. (Prime Curios)

The number 25 is the smallest aspiring number. An imperfect number is *aspiring* if its aliquot sequence ends in a perfect number. (Number Gossip)

The number 25 is the smallest *Friedman number*: a number that can be written in a nontrivial way using its own digits. So $25 = 5^2$. The next Friedman number is $121 = 11^2$. The largest four-digit Friedman number is $9261 = 21^{9-6}$. These numbers are named after Erich Friedman of Stetson University in DeLand, Florida (“The Athens of Florida”).

The 25th Mersenne prime, $2^{21701} - 1$, was found by two high school students, Laura A. Nickel and Landon Noll, in 1978.

2 Chapter 25 Twenty-Five XXV

The twenty-fifth President of the United States was William McKinley.

The twenty-fifth state to enter the Union was Arkansas.

The twenty-fifth largest state in the United States is Illinois.

A *quarter* is 25 cents because it is a quarter of a dollar.

Two bits is 25 cents.