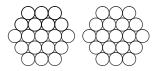
## 38 Thirty-Eight XXXVIII



Corresponding ordinal: thirty-eighth.

The number 38 is the twentieth even number and the twenty-fifth composite number.

As a product of primes:  $38 = 2 \cdot 19$ .

The number 38 has four divisors: 1, 2, 19, 38.

The number 38 is the thirtieth deficient number: s(38) = 1 + 2 + 19 = 22 < 38.

As a sum of four or fewer squares:  $38 = 2 \cdot 1^2 + 6^2 = 2^2 + 3^2 + 5^2 = 2^2 + 2 \cdot 3^2 + 4^2$ .

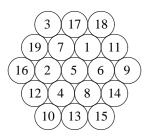
The number 38 is the sum of the squares of the first three primes.

As the sum of nine or fewer cubes:  $38 = 3 \cdot 1^3 + 2^3 + 3^3$ .

The number 38 appears in only one Pythagorean triple, [38, 360, 362], which is not primitive because 38 is twice an odd number.

As a sum of two odd primes: 38 = 7 + 31 = 19 + 19. So 38 can be written as a sum of two distinct odd primes in only one way. This is also true of 8, 10, 12, and 14. There are no other such numbers less than a million.

In the only nontrivial normal magic hexagon, each row adds up to 38.



The number 38 is the largest even number that cannot be written as the sum of two odd composite numbers (Number Gossip). In fact, any number bigger than 38 can be written as the sum of a number that is divisible by 3, plus 15, 25, or 35.

The sum of the first 38 cubed primes is the prime 35 287 433.

## 2 Chapter 38 Thirty-Eight XXXVIII

If you arrange the valid Roman numerals in alphabetical order, then XXXVIII is the last one. (Number Gossip)

A .38 Special is a handgun cartridge designed by Smith & Wesson.

The thirty-eighth President of the United States was Gerald Rudolph Ford, Jr.

The thirty-eighth state to enter the Union was Colorado.

The thirty-eighth largest state in the United States is Indiana.