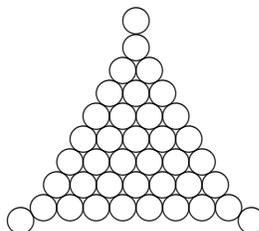


# 39 Thirty-nine XXXIX



Corresponding ordinal: thirty-ninth.

The number 39 is the twentieth odd number and the twenty-sixth composite number.

As a product of primes:  $39 = 3 \cdot 13$ .

The number 39 has four divisors: 1, 3, 13, 39.

The number 39 is the thirty-first deficient number:  $s(39) = 1 + 3 + 13 = 17 < 39$ .

As a sum of four or fewer squares:  $39 = 3 \cdot 1^2 + 6^2 = 1^2 + 2^2 + 3^2 + 5^2$ .

As the sum of nine or fewer cubes:  $39 = 4 \cdot 1^3 + 2^3 + 3^3$ .

As a difference of two squares:  $39 = 8^2 - 5^2 = 20^2 - 19^2$ .

The number 39 appears in five Pythagorean triples: [15, 36, 39], [39, 52, 65], [39, 80, 89], [39, 252, 255], [39, 760, 761]. The third and the last are primitive.

As a sum of three odd primes:  $39 = 3 + 5 + 31 = 3 + 7 + 29 = 3 + 13 + 23 = 3 + 17 + 19 = 5 + 5 + 29 = 5 + 11 + 23 = 5 + 17 + 17 = 7 + 13 + 19 = 11 + 11 + 17 = 13 + 13 + 13$ .

The number  $39 = 3 + 5 + 7 + 11 + 13$  is the sum of the primes between its smallest and largest prime factors.

The number 39 is has the same number of letters in its Roman numeral as its square (Number Gossip). Other numbers with that property are 1, 2, 8, 10, 20, 23, 32, 34, and 38. That's all of them that are below 64, and  $64^2 = 4096$  doesn't have a garden-variety Roman numeral.

There are three partitions of 39 that multiply to give the same number:  $4 + 15 + 20$ ,  $5 + 10 + 24$ , and  $6 + 8 + 25$ . The products are all 1200. This is the *Christmas Ribbon Problem* for three packages: Find three different boxes with the same volume and the

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same ribbon length. The number 39 is the smallest number with this property. Note that the ribbon length is actually 156. (Number Freak)

There are 39 patterns of distributions of a bridge hand into four suits, ranging from 4-3-3-3 to 13-0-0-0. (Number Freak)

David Wells, in *The Penguin dictionary of curious and interesting numbers*, says that 39 “appears to be the first uninteresting number, which of course makes it an especially interesting number.” He changes that to 51 in the revised edition.

A total of 39 delegates signed the U.S. Constitution.

The numerical value of the Hebrew phrase meaning “God is one” is 39. This phrase is from Deuteronomy 6:4.

The thirty-ninth President of the United States was Jimmy Carter.

The thirty-ninth state to enter the Union was North Dakota.

The thirty-ninth largest state in the United States is Maine.