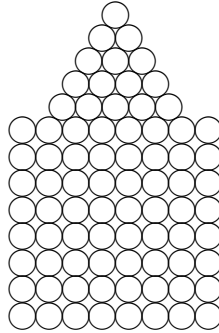


79 Seventy-Nine LXXIX



Corresponding ordinal: seventy-ninth.

The number 79 is the fortieth odd number, the twenty-second prime number, and the sixty-first deficient number.

As a sum of four or fewer squares: $79 = 1^2 + 2^2 + 5^2 + 7^2 = 3^2 + 3^2 + 5^2 + 6^2 = 2^2 + 5^2 + 5^2 + 5^2$.

As a sum of nine or fewer cubes: $79 = 7 \cdot 1^3 + 2^3 + 4^3 = 1^3 + 3 \cdot 2^3 + 2 \cdot 3^3$.

As the difference of two squares: $79 = 40^2 - 39^2$.

The number 79 appears in only one Pythagorean triple: [79, 3120, 3121], which is primitive, of course.

As a sum of three odd primes: $79 = 3 + 3 + 73 = 3 + 5 + 71 = 3 + 17 + 59 = 3 + 23 + 53 = 3 + 29 + 47 = 5 + 7 + 67 = 5 + 13 + 61 = 5 + 31 + 43 = 5 + 37 + 37 = 7 + 11 + 61 = 7 + 13 + 59 = 7 + 19 + 53 = 7 + 29 + 43 = 7 + 31 + 41 = 11 + 31 + 37 = 13 + 13 + 53 = 13 + 19 + 47 = 13 + 23 + 43 = 13 + 29 + 37 = 17 + 19 + 43 = 17 + 31 + 31 = 19 + 19 + 41 = 19 + 23 + 37 = 19 + 29 + 31$.

The number $\sqrt{79}$ is equal to 8.888 to three decimal places.

The number 79 is the smallest prime n such that 2^n contains every digit: $2^{79} = 604\,462\,909\,807\,314\,587\,353\,088$.

The number 79 is the smallest emirp whose reversal is the next emirp. Does that ever happen again? Not before two million.

The number $7! + 9! - 79 = 367841$ is a prime, and so is its reversal 148763 (so it's an

2 Chapter 79 Seventy-Nine LXXIX

emirp).

The number 79 is the average of two consecutive Mersenne primes 31 and 127. So are 5, 19, and 4159, but these aren't emirps. The next candidate, 69 631 isn't even prime.

The atomic number of gold is 79.

President Woodrow Wilson was in the Princeton class of '79.

President James Garfield died 79 days after he was shot.