\[ 7 = 6 + 1 \]

7 is a prime number.

Smallest polygon not constructible: Heptagon.

Newman-Shanks-Williams prime; regular prime.

Mersenne prime: \( 2^{3} - 1 = M_3 \).

7 is the only prime one less than a cube.

Largest number: 7 prime knot with 7 crossings.

First cubic prime: \( 7 = 2^3 - 1 \).

Lucas prime: \( 7^3 = 1 + 18 + 18^2 = 1 + 18 + 18^2 \).

Error correcting code.

\[ 7^2 = 2^3 - 1 \]

Cox product can only be defined in dimensions 3 or 7.

7 is a Sylvester number.

7 is a square of a prime: \( 7^2 = 2^3 - 1 \).

7 is a prime that is not the sum of 3 squares.

Maximum regions 3 lines divide a plane into.

All sufficiently large numbers. von Staudt-Clausen theorem.

The sum of 7 positive cubes.

Carol number and Kynea number.

Dano plane has 7 points and 7 lines.

Color any map on a torus. 7 types of Ehrlich polyhedron and systolically.

Pandorovian number. Integers of \( \mathbb{Q} \) unique factorization.

Seven rectangles needed to divide a rectangle into pieces that don't fit inside each other.

Can't draw regular 7-gon with traditional methods.

7 breeze patterns (symmetry). 7 of 10 prime numbers with 7-digit prime.