MATH MODULE

Python has a built-in module that you can use for mathematical tasks.
The math module has a set of methods and constants.

Math Modules

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Method           Description
math.acos()      Returns the arc cosine of a number
math.acosh()     Returns the inverse hyperbolic cosine of a number
math.asin()      Returns the arc sine of a number
math.asinh()     Returns the inverse hyperbolic sine of a number
math.atan()      Returns the arc tangent of a number in radians
math.atan2()     Returns the arc tangent of y/x in radians
math.atanh()     Returns the inverse hyperbolic tangent of a number
math.ceil()      Rounds a number up to the nearest integer
math.comb()      Returns the number of ways to choose k items from n items without repetition and
math.copysign()  Returns a float consisting of the value of the first parameter and the sign of t
math.cos()       Returns the cosine of a number
math.cosh()      Returns the hyperbolic cosine of a number
math.degrees()   Converts an angle from radians to degrees
math.dist()      Returns the Euclidean distance between two points (p and q), where p and q are t
math.erf()       Returns the error function of a number
math.erfc()      Returns the complementary error function of a number
math.exp()       Returns E raised to the power of x
math.expm1()     Returns Ex - 1
math.fabs()      Returns the absolute value of a number
math.factorial() Returns the factorial of a number
math.floor()     Rounds a number down to the nearest integer
math.fmod()      Returns the remainder of x/y
math.frexp()     Returns the mantissa and the exponent, of a specified number
math.fsum()      Returns the sum of all items in any iterable (tuples, arrays, lists, etc.)
math.gamma()     Returns the gamma function at x
math.gcd()       Returns the greatest common divisor of two integers
math.hypot()     Returns the Euclidean norm
math.isclose()   Checks whether two values are close to each other, or not
math.isfinite()  Checks whether a number is finite or not
math.isinf()     Checks whether a number is infinite or not
math.isnan()     Checks whether a value is NaN (not a number) or not
math.isqrt()     Rounds a square root number downwards to the nearest integer
math.ldexp()     Returns the inverse of math.frexp() which is x * (2**i) of the given numbers x a
math.lgamma()    Returns the log gamma value of x
math.log()       Returns the natural logarithm of a number, or the logarithm of number to base
math.log10()     Returns the base-10 logarithm of x
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math.log1p()      Returns the natural logarithm of 1+x
math.log2()       Returns the base-2 logarithm of x
math.perm()       Returns the number of ways to choose k items from n items with order and without
math.pow()        Returns the value of x to the power of y
math.prod()       Returns the product of all the elements in an iterable
math.radians()    Converts a degree value into radians
math.remainder()  Returns the closest value that can make numerator completely divisible by the de
math.sin()        Returns the sine of a number
math.sinh()       Returns the hyperbolic sine of a number
math.sqrt()       Returns the square root of a number
math.tan()        Returns the tangent of a number
math.tanh()       Returns the hyperbolic tangent of a number
math.trunc()      Returns the truncated integer parts of a number
```

Math Constants

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Constant    Description
math.e      Returns Euler's number (2.7182...)
math.inf    Returns a floating-point positive infinity
math.nan    Returns a floating-point NaN (Not a Number) value
math.pi     Returns PI (3.1415...)
math.tau    Returns tau (6.2831...)
```