

Python 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 Methods

Method	Description
1. <code>math.acos(x)</code>	Returns the arc cosine value of x
2. <code>math.acosh(x)</code>	Returns the hyperbolic arc cosine of x
3. <code>math.asin(x)</code>	Returns the arc sine of x
4. <code>math.asinh(x)</code>	Returns the hyperbolic arc sine of x
5. <code>math.atan(x)</code>	Returns the arc tangent value of x
6. <code>math.atan2(y, x)</code>	Returns the arc tangent of y/x in radians
7. <code>math.atanh(x)</code>	Returns the hyperbolic arctangent value of x
8. <code>math.ceil(x)</code>	Rounds a number upwards to the nearest integer, and returns the result
9. <code>math.comb(n, k)</code>	Returns the number of ways to choose k items from n items without repetition and order
10. <code>math.copysign(x, y)</code>	Returns a float consisting of the value of the first parameter and the sign of the second
11. <code>math.cos(x)</code>	Returns the cosine of x
12. <code>math.cosh(x)</code>	Returns the hyperbolic cosine of x
13. <code>math.degrees(x)</code>	Converts an angle from radians to degrees

14. <code>math.fabs(x)</code>	Returns the absolute value of a number
15. <code>math.factorial()</code>	Returns the factorial of a number
16. <code>math.floor(x)</code>	Rounds a number downwards to the nearest integer, and returns the result
17. <code>math.fmod(x, y)</code>	Returns the remainder of specified numbers when a number is divided by another
18. <code>math.frexp()</code>	Returns the mantissa and the exponent, of a specified value
19. <code>math.fsum(iterable)</code>	Returns the sum of all items in an iterable (tuples, arrays, lists, etc.)
20. <code>math.gcd()</code>	Returns the highest value that can divide two integers
21. <code>math.isclose()</code>	Checks whether two values are close, or not
22. <code>math.isfinite(x)</code>	Checks whether x is a finite number
23. <code>math.isinf(x)</code>	Check whether x is a positive or negative infinity
24. <code>math.isnan(x)</code>	Checks whether x is NaN (not a number)
25. <code>math.isqrt(n)</code>	Returns the nearest integer square root of n
26. <code>math.log(x, base)</code>	Returns the natural logarithm of a number, or the logarithm of number to base
27. <code>math.log10(x)</code>	Returns the base-10 logarithm of x
28. <code>math.log2(x)</code>	Returns the base-2 logarithm of x
29. <code>math.pow(x, y)</code>	Returns the value of x to the power of y
30. <code>math.radians(x)</code>	Converts a degree value (x) to radians
31. <code>math.remainder(x, y)</code>	Returns the closest value that can make numerator completely divisible by the denominator

32. <code>math.sin(x)</code>	Returns the sine of x
33. <code>math.sqrt(x)</code>	Returns the square root of x
34. <code>math.tan(x)</code>	Returns the tangent of x

Math Constants

Constant	Description
35. <code>math.e</code>	Returns Euler's number (2.7182...)
36. <code>math.inf</code>	Returns a floating-point positive infinity
37. <code>math.nan</code>	Returns a floating-point NaN (Not a Number) value
38. <code>math.pi</code>	Returns PI (3.1415...)