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
<u>math.asinh()</u>	Returns the inverse hyperbolic sine of a number
<u>math.atan()</u>	Returns the arc tangent of a number in radians
<u>math.atan2()</u>	Returns the arc tangent of y/x in radians
<u>math.atanh()</u>	Returns the inverse hyperbolic tangent of a number
<u>math.ceil()</u>	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 order
<u>math.copysign()</u>	Returns a float consisting of the value of the first parameter and the sign of the second parameter
math.cos()	Returns the cosine of a number
math.cosh()	Returns the hyperbolic cosine of a number
<u>math.degrees()</u>	Converts an angle from radians to degrees
<u>math.dist()</u>	Returns the Euclidean distance between two points (p and q), where p and q are the coordinates of that point
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 E ^x - 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.)
<u>math.gamma()</u>	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
<u>math.isqrt()</u>	Rounds a square root number downwards to the nearest integer
<u>math.ldexp()</u>	Returns the inverse of $\underline{math.frexp()}$ which is x * (2**i) of the given numbers x and i
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
math.log1p()	Returns the natural logarithm of 1+x
math.log2()	Returns the base-2 logarithm of x
<u>math.perm()</u>	Returns the number of ways to choose k items from n items with order and without repetition
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
<u>math.remainder()</u>	Returns the closest value that can make numerator completely divisible by the denominator
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

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
<u>math.pi</u>	Returns PI (3.1415)
math.tau	Returns tau (6.2831)