Mathematical functions

Trigonometric functions

sin(x, /[, out, where, casting, order, …])	Trigonometric sine, element-wise.
cos(x, /[, out, where, casting, order, …])	Cosine element-wise.
tan(x, /[, out, where, casting, order, …])	Compute tangent element-wise.

Rounding

around(a[, decimals, out])	Evenly round to the given number of decimals.
round_(a[, decimals, out])	Round an array to the given number of decimals.
rint(x, /[, out, where, casting, order, …])	Round elements of the array to the nearest integer.
fix(x[, out])	Round to nearest integer towards zero.
floor(x, /[, out, where, casting, order, …])	Return the floor of the input, element-wise.
ceil(x, /[, out, where, casting, order, …])	Return the ceiling of the input, element-wise.
trunc(x, /[, out, where, casting, order, …])	Return the truncated value of the input, element-wise.

Sums, products, differences

prod(a[, axis, dtype, out, keepdims, …])	Return the product of array elements over a given axis.
sum(a[, axis, dtype, out, keepdims, …])	Sum of array elements over a given axis.
nanprod(a[, axis, dtype, out, keepdims])	Return the product of array elements over a given axis treating Not a Numbers (NaNs) as ones.
nansum(a[, axis, dtype, out, keepdims])	Return the sum of array elements over a given axis treating Not a Numbers (NaNs) as zero.
cumprod(a[, axis, dtype, out])	Return the cumulative product of elements along a given axis.
cumsum(a[, axis, dtype, out])	Return the cumulative sum of the elements along a given axis.
diff(a[, n, axis, prepend, append])	Calculate the n-th discrete difference along the given axis.
ediff1d(ary[, to_end, to_begin])	The differences between consecutive elements of an array.
gradient(f, *varargs[, axis, edge_order])	Return the gradient of an N-dimensional array.

Exponents and logarithms

Arithmetic operations

add(x1, x2, /[, out, where, casting, order, …])	Add arguments element-wise.
reciprocal(x, /[, out, where, casting, …])	Return the reciprocal of the argument, element-wise.
positive(x, /[, out, where, casting, order, …])	Numerical positive, element-wise.
negative(x, /[, out, where, casting, order, …])	Numerical negative, element-wise.
multiply(x1, x2, /[, out, where, casting, …])	Multiply arguments element-wise.
divide(x1, x2, /[, out, where, casting, …])	Returns a true division of the inputs, element-wise.
power(x1, x2, /[, out, where, casting, …])	First array elements raised to powers from second array, element-wise.
subtract(x1, x2, /[, out, where, casting, …])	Subtract arguments, element-wise.

Miscellaneous

clip(a, a_min, a_max[, out])	Clip (limit) the values in an array.
sqrt(x, /[, out, where, casting, order, …])	Return the non-negative square-root of an array, element-wise.
cbrt(x, /[, out, where, casting, order, …])	Return the cube-root of an array, element-wise.
square(x, /[, out, where, casting, order, …])	Return the element-wise square of the input.
real_if_close(a[, tol])	If input is complex with all imaginary parts close to zero, return real parts.