



[Scipy.org \(http://scipy.org/\)](http://scipy.org/) [Docs \(http://docs.scipy.org/\)](http://docs.scipy.org/)

[NumPy v1.10 Manual \(../../index.html\)](http://docs.scipy.org/doc/numpy/v1.10/manual/) [NumPy Reference \(../index.html\)](http://docs.scipy.org/doc/numpy/reference/generated/numpy.subtract.html)

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numpy.subtract

numpy.subtract(x1, x2[, out]) = <ufunc 'subtract'>

Subtract arguments, element-wise.

Parameters: **x1, x2** : array_like

The arrays to be subtracted from each other.

Returns: **y** : ndarray

The difference of x1 and x2, element-wise. Returns a scalar if both x1 and x2 are scalars.

Previous topic

[numpy.power
\(numpy.power.html\)](http://docs.scipy.org/doc/numpy/reference/generated/numpy.power.html)

Next topic

[numpy.true_divide
\(numpy.true_divide.](http://docs.scipy.org/doc/numpy/reference/generated/numpy.true_divide.html)

Notes

Equivalent to $x1 - x2$ in terms of array broadcasting.

Examples

```
>>> np.subtract(1.0, 4.0)
-3.0
```

>>>

```
>>> x1 = np.arange(9.0).reshape((3, 3))
>>> x2 = np.arange(3.0)
>>> np.subtract(x1, x2)
array([[ 0.,  0.,  0.],
       [ 3.,  3.,  3.],
       [ 6.,  6.,  6.]])
```

>>>