



5

4

3

4

5

4 # => array([7, 8, 9])

1.5  $\# \Rightarrow$  array([4.5, 6.5])



#  $\Rightarrow 8$  ( $= 3 * 4 + 4 * -1 + 5 * 0$ )

# => 12









# Using `numpy`

```
a = np.array([3, 4, 5])
```

```
a + 4 # => array([7, 8, 9])
```

```
a * 1.5 # => array([ 4.5,  6. ,  7.5])
```

```
b = np.array([4, -1, 0])
```

```
np.dot(a, b) # => 8 (= 3 * 4 + 4 * -1 + 5 * 0)
```

```
a.sum() # => 12
```

```
space = np.linspace(0, 2 * np.pi, 100)
```

```
sinusoid = np.sin(b)
```

# SciPy (Scientific Python)

