

3.2 Exercises

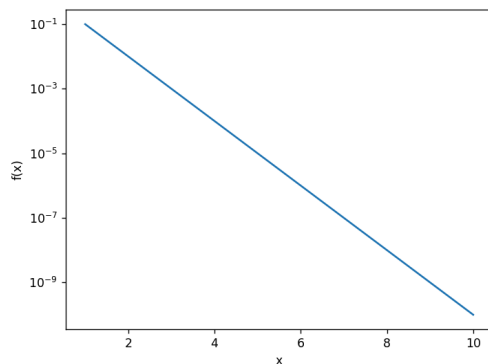
- 1)

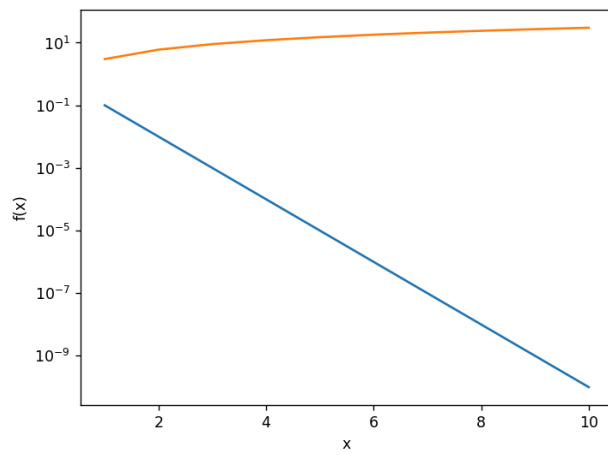
```
>>> x = np.linspace(0, 10, 11)
>>> y = np.arange(0, 11, 1)
>>> x
array([ 0.,  1.,  2.,  3.,  4.,  5.,  6.,  7.,  8.,  9., 10.])
>>> y
array([ 0,  1,  2,  3,  4,  5,  6,  7,  8,  9, 10])
>>> x.size
11
>>> y.size
11
```
- 2)

```
>>> x[1:4]
array([1., 2., 3.])
```
- 3)

```
>>> print('The first three entries of x are', x[:3])
The first three entries of x are [0.  1.  2.]
```
- 4) The entries of $w = [1.e-01 \ 1.e-02 \ 1.e-03 \ 1.e-04 \ 1.e-05 \ 1.e-06 \ 1.e-07 \ 1.e-08 \ 1.e-09 \ 1.e-10]$

```
>>> x = np.arange(1, w.size+1, 1)
>>> x
array([ 1,  2,  3,  4,  5,  6,  7,  8,  9, 10])
>>> plt.semilogy(x,w)
[<matplotlib.lines.Line2D object at 0x000001B7C7DCF3E0>]
>>> plt.xlabel('x')
Text(0.5, 0, 'x')
>>> plt.ylabel('f(x)')
Text(0, 0.5, 'f(x)')
>>> plt.show()
```





5)

4.2 Exercises

1) We were working with errors when we created testDot.py