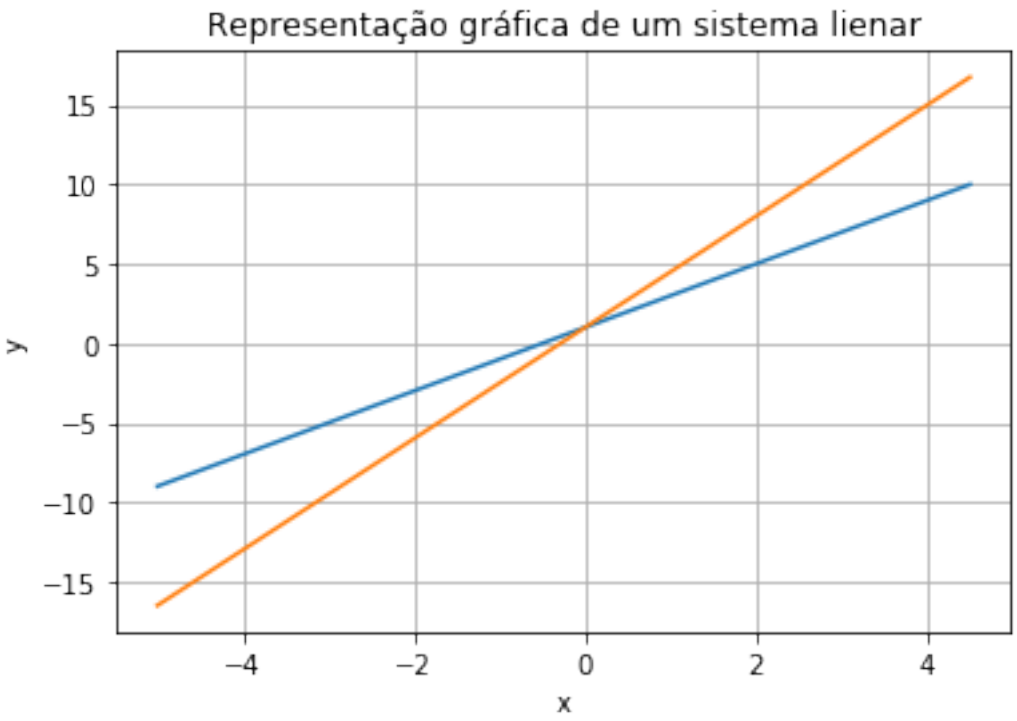
graficos

June 25, 2018

```
In [1]: import matplotlib.pyplot as plt
        import numpy as np

In [2]: x=np.arange(-5,5,.5)

In [3]: x

Out[3]: array([-5. , -4.5, -4. , -3.5, -3. , -2.5, -2. , -1.5, -1. , -0.5,  0. ,
                0.5,  1. ,  1.5,  2. ,  2.5,  3. ,  3.5,  4. ,  4.5])

In [4]: y1=2*x+1

In [5]: y1

Out[5]: array([-9., -8., -7., -6., -5., -4., -3., -2., -1.,  0.,  1.,  2.,  3.,
                4.,  5.,  6.,  7.,  8.,  9., 10.])

In [6]: y2=(7/2)*x+1

In [7]: y2

Out[7]: array([-16.5 , -14.75, -13.  , -11.25,  -9.5 ,  -7.75,  -6.  ,  -4.25,
                -2.5 ,  -0.75,   1.  ,   2.75,   4.5 ,   6.25,   8.  ,   9.75,
                11.5 ,  13.25,  15.  ,  16.75])

In [8]: fig, ax = plt.subplots()
        ax.plot(x,y1)
        ax.plot(x,y2)
        ax.set(xlabel='x', ylabel='y',
               title='Representação gráfica de um sistema lienar')
        ax.grid()
        fig.savefig("sl.png")
        plt.show()
```


Representação gráfica de um sistema lienar
15
10
5
0
−5
−10
−15
y
−4
−2
0
2
4
x