

gauss_03

June 25, 2018

```
In [1]: import numpy as np
```

```
In [2]: A=np.array([[1,2,1],[1,-3,5],[2,-1,3]], dtype=float)
        print(A)
```

```
[[ 1.  2.  1.]
 [ 1. -3.  5.]
 [ 2. -1.  3.]]
```

```
In [3]: b=np.array([[12],[1],[10]])
        print(b)
```

```
[[12]
 [ 1]
 [10]]
```

```
In [9]: x = np.linalg.solve(A, b)
        print(x)
```

```
[[5.]
 [3.]
 [1.]]
```

0.0.1 Verifique se a solução está correta:

```
In [10]: np.allclose(np.dot(A, x), b)
```

```
Out[10]: True
```