

[Aula] Prática 1

```
main.py
1 def resolver_sistema_linear(a0, a1, y0, y1):
2     a1 = (y1 - y0) / (0.6 - 0.1)
3
4     a0 = y0 - a1 * 0.1
5
6     return a0, a1
7
8 y0 = 1.221
9 y1 = 3.320
10
11 a0, a1 = resolver_sistema_linear(0, 0, y0, y1)
12 print("a0 =", round(a0, 4))
13 print("a1 =", round(a1, 4))
14
```

input

```
a0 = 0.8012
a1 = 4.198

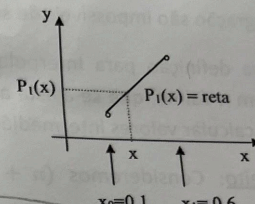
...Program finished with exit code 0
Press ENTER to exit console.
```

sendo $x_k \neq x_j$ com $i \neq j$

Exemplo 1

Calcular $P_1(0.2)$ e $P_1(0.3)$ a partir dos pontos abaixo:

i	0	1
x_i	0.1	0.6
y_i	1.221	3.320



Handwritten calculations:

$$\begin{cases} a_0 + a_1 \cdot 0.1 = 1.221 \\ a_0 + a_1 \cdot 0.6 = 3.32 \end{cases}$$
$$\begin{aligned} a_0 + 4.198 \cdot 0.1 &= 1.221 \\ a_0 &= 1.221 - 0.4198 \\ a_0 &= 0.8012 \end{aligned}$$
$$m = \frac{y_1 - y_0}{x_1 - x_0} = \frac{3.32 - 1.221}{0.6 - 0.1} = \frac{2.099}{0.5} = 4.198$$

Handwritten notes and corrections:

- $2 - 1.6408 = 0.3592$
- $3 - 2.0606 = 0.9394$
- $4 - 2.4804 = 1.5196$
- $5 - 2.9002 = 2.1198$
- $6 - 3.320 = 2.6800$
- 1.6408
- $1.221 = a_0 + a_1 \cdot 0.1$
- $3.320 = a_0 + a_1 \cdot 0.6$
- $a_0 =$
- $a_1 =$
- \rightarrow lógico.