

MK3_BartoszKloc_59122

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[1]: import numpy as np
import pandas as pd

df = pd.read_csv("war2.csv", sep=";")
df["y"] = df["y"].astype(str).str.replace(",", ".", regex=False).astype(float)

A = np.column_stack([df["x1"].to_numpy(float), df["x2"].to_numpy(float)])
y = df["y"].to_numpy(float)

a, b = (np.linalg.pinv(A) @ y)
print("a =", a)
print("b =", b)
print("rank(A) =", np.linalg.matrix_rank(A))
print("a + 2b =", a + 2*b)
```

```
a = 1.81177492885091
b = 3.6235498577018195
rank(A) = 1
a + 2b = 9.05887464425455
```

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[ ]:
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