geometry2020

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CONTENTS:

main.**cartesian_representation_line**(*a*, *b*, *type=1*)

This function print the cartesian presentation of a line a: numpy-array of the first point b: numpy-array of the direction (type = 0) or of the second point (type = 1)

main.**conic_section_classification**(*coeff=[]*)

This function provides a classification of a conic section

coeff: list of the coefficient of the equation of the conic section

if the equation is

A x^2 + B xy + C y^2 + D x + E y + F = 0

then the array coeff is

[A,B,C,D,E,F]

main.**gauss_elimination**(*matrix*)

This function compute Gauss elimination process matrix: numpy-array

main.**linear_dependence**(*A*)

This function answer to the question "Are these vectors linearly independent?"

A : numpy-array matrix with vectors as rows

main.**linear_equations**(*matrix*, *vector*) → None

this function resolve a system of linear equations :param matrix: matrix of coefficients :param vector: vector of constant terms

```
>>> linear_equations(np.eye(2),array([1,1]))
[1,1]
```

INDICES AND TABLES

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main, **??**