## Basic Algorithms and Programming Practice 3

## 4TPU140U

## The functions: a library of geometry

You will write a small geometry library.

 $Download\ the\ file\ {\tt geometry.py}, located\ at\ {\tt https://www.labri.fr/perso/boussica/archives/cours/4TPU140U/geometry.py}.$ 

- Implement the functions that are present in this file.
- In a file test\_geometry.py, import the library geometry.py and test your library with different good examples.
- How do you define a function that takes as parameters a polygon and a vector v, and returns a polygon translated by v? Add this function to your library and test that new function
- How do you define a function that returns true if a segment intersect a polygon, and false in the other case? Implement and test that function.