

## Weekly test #6

Name:

Surname:

**Exercise 1**

Find all the stationary points of the following function and classify them:

$$f(x, y) = e^{x^2 + xy + y^2}.$$

**Write your solution here:**

**Exercise 2**

Write the Lagrangian and the Bordered Hessian of the following problem

$$\begin{aligned} & \max / \min \quad xy \\ & g(x, y) = x + y = 6 \end{aligned}$$

**Write your solution here:**