

MA 158

Quiz 15

14 Νοέμβριος 2016

Instructions: Show all work, with clear logical steps. No work or hard-to-follow work will lose points.

Problem. (4 points) For the system of equations

$$\begin{cases} x^2 + y^2 = 8 \\ y - x = k \end{cases}$$

find all values of k so that there will be

- (a) one solution,
- (b) two solutions, and
- (c) no solutions