

MATH1009 – Quiz M1a
Wednesday, February 13, 2019
Instructor: Abuzer Yakaryılmaz

Name and surname:

Student number:

Questions

(30 minutes / 5 points in total)

Consider the following system of linear equations:

$$\begin{array}{rrcr} 3x_1 & + & 2x_2 & + & x_3 & = & -1 \\ 2x_1 & + & x_2 & - & x_3 & = & 3 \\ -x_1 & - & x_2 & - & x_3 & = & 2 \end{array}$$

1. (1 point) Write down the augmented matrix, say A , of this system.
2. (3 points) Start with matrix A . Then, apply a series of elementary row operations and obtain the matrix, say B , that is in reduced row-echelon form. (Matrix A is row-equivalent to matrix B .) Explicitly write down each applied row operation.
3. (1 point) Write down the solution set of this system.

During the exam, please do not use any electronic device or any course (related) material.