

## Quiz 2

This quiz is graded out of 10 marks. No books, calculators, notes or cell phones are allowed. You must show all your work, the correct answer is worth 1 mark the remaining marks are given for the work. If you need more space for your answer use the back of the page.

**Question 1.** Solve the following system of linear equations using Gaussian elimination and back substitution.

$$\begin{array}{rccccrcr} 2x_1 & & & & - & x_4 & = & 0 \\ -2x_1 & & & - & x_3 & + & 2x_4 & = & 2 \\ 3x_1 & - & 3x_2 & + & 4x_3 & - & x_4 & = & -1 \end{array}$$