Name: _____
Student ID: _____

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.*(5 marks)* Consider the matrix:

$$B = \begin{bmatrix} 0 & 2 \\ 3 & 1 \end{bmatrix}$$

Find the matrix A if

$$(B^t + I + A^{-1})^t = \begin{bmatrix} 4 & 3 \\ 2 & 1 \end{bmatrix}$$

Question 2.*(5 marks)* Solve the following system by Gaussian elimination or Gauss-Jordan elimination.

$$\begin{array}{rcrcrcl} 2x_1 & + & x_2 & - & 2x_3 & = & 2 \\ 5x_1 & - & x_2 & + & 3x_3 & = & 2 \\ 9x_1 & + & x_2 & - & x_3 & = & 6 \end{array}$$