Name: _____

Student ID: _____

Bonus Quiz 1

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)* Use Cramer's rule solve the following system

$$
\begin{array}{rcrcrcl}
x_1 & & & & & = & 0 \\
2x_1 & + & 2x_2 & & & = & 1 \\
3x_1 & - & x_2 & - & 3x_3 & = & 2
\end{array} \ .
$$

Question 2. *(5 marks)* Use the adjoint to find the inverse of the following matrix

$$B = \begin{bmatrix} 2 & 3 & 0 \\ 4 & 5 & 0 \\ 0 & 0 & 1 \end{bmatrix}.$$