

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. §1.2 #2c (4 marks) Determine the values of a for which the system has no solutions, exactly one solution, or infinitely many solutions.

$$\begin{array}{rcccccccl} x & + & 2y & - & 3z & = & 4 \\ 3x & - & y & + & 5z & = & 2 \\ 4x & + & y & + & (a^2 - 14)z & = & a + 2 \end{array}$$

Question 3. §1.2 #20 (6 marks) Solve the given linear system by any method.

$$\begin{array}{ccccccccc} & & v & + & 3w & - & 2x & = & 0 \\ 2u & + & v & - & 4w & + & 3x & = & 0 \\ 2u & + & 3v & + & 2w & - & x & = & 0 \\ -4u & - & 3v & + & 5w & - & 4x & = & 0 \end{array}$$