Name: _____

Quiz 1

This quiz is graded out of 12 marks. No books, watches, 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. §1.1 TF Determine whether the statement is true or false, and justify your answer.

c. *(3 marks)* The linear system $\begin{cases} x - y = 3 \\ 2x - 2y = k \end{cases}$ cannot have a unique solution, regardless of the value of k.

e. *(3 marks)* If the number of equations in a linear system exceeds the num- ber of unknowns, then the system must be inconsistent.

f. *(3 marks)* If each equation in a consistent linear system is multiplied through by a constant c, then all solutions to the new system can be obtained by multiplying solutions from the original system by c.

h. *(3 marks)* The linear system with corresponding augmented matrix $\begin{bmatrix} 2 & -1 & 4 \\ 0 & 0 & -1 \end{bmatrix}$ is consistent.