Name: _____

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 #TF *(2 marks)* Determine whether the statement is true or false, and justify your answer.
If an elementary row operation is applied to a matrix that is in row echelon form, the resulting matrix will still be in row echelon form.

Question 2. §1.2 #TF *(3 marks)* Determine whether the statement is true or false, and justify your answer.
Every matrix has a unique row echelon form.

Question 3. §1.2 #20 *(5 marks)* Solve the given linear system by any method.

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