

Name _____ Linear Algebra, Quiz 2

For problems 1-4 use the augmented matrix below.

$$\left[\begin{array}{ccccc|c} 1 & 2 & 0 & 0 & 1 & 0 \\ 0 & 0 & 1 & 0 & 1 & 2 \\ 0 & 0 & 0 & 1 & 1 & 0 \end{array} \right]$$

1) What is the dimension of the solution set?

2) Write the system as a matrix equation.

3) Write the system as a system of linear equations.

4) Find the solution set.

5) Row reduce the matrix below. That is, find the matrix in reduced row echelon form that is row equivalent to it.

$$\begin{bmatrix} 1 & 2 \\ 2 & 7 \end{bmatrix}$$