

Practice for Quiz 2

Name: _____

1. Apply elementary row operations to transform the *augmented matrix* for the following system of linear equations into *reduced row echelon form*, then solve the system using vector notation. Be sure to clearly identify the row operations you use at each step.

$$\begin{array}{rrrrrcl} 2x & - & y & - & 5z & + & 7w & = & 0 \\ 2x & + & y & - & 3z & + & 5w & = & 4 \\ x & + & y & - & z & + & 2w & = & 3 \end{array}$$

2. Apply elementary row operations to transform the *augmented matrix* for the following system of linear equations into *reduced row echelon form*, then solve the system using vector notation. Be sure to clearly identify the row operations you use at each step.

$$\begin{array}{rrrrrr} x & + & y & + & 5z & - & 3w & = & 5 \\ x & + & 3y & + & 9z & - & 7w & = & 7 \\ & & y & + & 2z & - & 2w & = & 1 \\ x & + & 2y & + & 7z & - & 5w & = & 6 \end{array}$$