

Name:

Section (time):

### Math 340 Quiz 3

- 1.) Represent the following system of equations as an augmented matrix.

$$10x_1 + 9x_2 + x_3 - 9 = 0$$

$$9x_2 + x_3 + 1 = 0$$

$$10x_1 - x_3 = 8$$

$$x_4 = x_1$$

- 2.) Reduce the following matrix to reduced row echelon form.

$$A = \begin{bmatrix} 0 & -1 & 4 \\ 4 & -2 & 8 \\ 1 & 0 & 0 \end{bmatrix}$$