

I.D. \_\_\_\_\_

Quiz 1 MATH 302-T-032)

Sr. # \_\_\_\_\_

**QI.** Consider the following Homogeneous system of Linear Equations:  $A X = O$  with

$$A = \begin{bmatrix} d1 & d2 & d3 & d4 & d5 & d6 \\ d1 & 10 & d3 & d4 & 0 & d6 \\ d1 & d2 & d3 & -1 & d5 & d6 \end{bmatrix}$$

where  $d_i = i$ -th digit of your ID Number.

(1) Write the Augmented Matrix of the System.

(2). Find the RREF of the Augmented Matrix

(3) Which variables are dependent in the system.

(4) Write the general solution of the system in the Vector Form.

**QII.** Write a basis of the subspace  $V = \{(x, -2x, x + y, y + z) : x, y, z \in R\}$ .