

Quiz 4

Consider the following Linear System. You are also given the reduced row echelon form of the system's augmented matrix. Use these two pieces of information to answer the questions below.

$$\begin{cases} x_1 + 2x_3 = 5 \\ 3x_1 - 6x_2 = 9 \\ x_2 + x_3 = 1 \end{cases}$$

$$\begin{bmatrix} 1 & 0 & 2 & 5 \\ 0 & 1 & 1 & 1 \\ 0 & 0 & 0 & 0 \end{bmatrix}$$

- (4 points) What is the solution of the linear system in parametric form?
- (4 points) What is the solution of the linear system in parametric vector form?
- (1 point) Are there any free variables?
- (1 point) How many possible solutions are in the solution set of this linear system?