

Math 302-123

Quiz 1

Name:.....Sec#:.....ID#:.....Ser#:.....

Q.1: Let $S = \{(x, y, z) | ax + by + cz = 0, a, b, c \text{ are real}\}$ be a subset of 3 - D space. Show that S is a subspace of \mathbb{R}^3

Q.2: Solve the linear system

$$\begin{aligned}x_1 - 2x_2 + x_3 &= 2 \\3x_1 - x_2 + 2x_3 &= 5 \\2x_1 + x_2 + x_3 &= 1\end{aligned}$$