
Show all work. 5 points each.

1. (1.5 #17) Write the solution set of $x_1 + 9x_2 - 4x_3 = 0$ in parametric form and describe it geometrically. How does this compare with the the solution set of $x_1 + 9x_2 - 4x_3 = -2$?

2. (1.7#5) Determine if the columns of the matrix below form a linearly independent set. Justify your Answer.

$$A = \begin{bmatrix} 0 & -8 & 5 \\ 3 & -7 & 4 \\ -1 & 5 & -4 \\ 1 & -3 & 2 \end{bmatrix}$$