

MA 262 - Quiz 7 (Lessons 16–18)

1. Determine whether the vector $\begin{bmatrix} 1 \\ 2 \\ 3 \end{bmatrix}$ is in the span of the vectors

$$\begin{bmatrix} 3 \\ 1 \\ 4 \end{bmatrix} \text{ and } \begin{bmatrix} -1 \\ 3 \\ 2 \end{bmatrix} .$$

2. Find a basis of the null space of the matrix

$$\begin{bmatrix} -1 & 4 & 2 & 5 \\ 0 & 1 & 1 & 1 \\ 3 & -2 & 4 & -5 \end{bmatrix} .$$