

Homework 1: Section 0.6 #6(a)

Let

$$S = \left\{ \begin{bmatrix} -1 \\ 2 \\ 4 \\ 3 \end{bmatrix}, \begin{bmatrix} 3 \\ -1 \\ 2 \\ 5 \end{bmatrix}, \begin{bmatrix} -5 \\ 5 \\ 6 \\ 1 \end{bmatrix} \right\}.$$

Determine whether S is linearly independent. If not, write one of the vectors in S as a linear combination of the others.