

Name:

1. Determine whether the matrices $\begin{bmatrix} 1 & 0 \\ 1 & 2 \end{bmatrix}$, $\begin{bmatrix} 1 & 2 \\ 2 & 1 \end{bmatrix}$, $\begin{bmatrix} 0 & 1 \\ 2 & 1 \end{bmatrix}$ are linearly independent in M_{22} .

Recall that M_{22} is the set of all 2×2 matrices of real numbers.