

1) [Quiz 6 Q2] Suppose that A is an $n \times n$ matrix having n linearly independent eigenvectors. Show that A^T also has n linearly independent eigenvectors.

2) [Hand-in Proof?]

3) [5.5] Find the eigenvalues and eigenvectors of the following matrix:

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

4) [6.1 Q14] Find the distance between $u = (0, -5, 2)^T$ and $v = (-4, -1, 4)^T$.