

Group _____ Scribe _____

Other group members _____

Group Quiz for Section 3.7

Let $\mathbf{T} \in \mathcal{L}(V)$ and let $\mathcal{B} = (v_1, \dots, v_n)$ be a basis for V . Show that $[\mathbf{T}]_{\mathcal{B}}$ is upper triangular if and only if

$$\mathbf{T}v_j \in \langle v_1, \dots, v_j \rangle$$

for each $j = 1, \dots, n$.