

Group _____ Scribe _____

Other group members _____

Group Quiz for Section 5.4

Suppose that $\mathbf{A} \in M_n(\mathbb{C})$ and that \mathbf{A} has spectral decomposition $\mathbf{A} = \mathbf{U}\mathbf{\Lambda}\mathbf{U}^*$. Let $k \in \mathbb{N}$ and find the spectral decomposition for \mathbf{A}^k .