MATH 332 Chapter 7 Objectives
By the end of Chapter 7 students should be able to:

7.1 Symmetric Matrices
- Determine when a matrix is symmetric.
- Orthogonally diagonalize a symmetric matrix.
- Apply theorem 2, to show a symmetric is orthogonally diagonalizable or vice versa.
- Question: Spectral Decomposition???

7.4 The Singular Value Decomposition
- Find the singular values for an $m \times n$ matrix $A$.
- Find a singular value decomposition $m \times n$ matrix $A$.
- Use an SVD to the the bases for the four fundamental subspaces.