

**MATH 215**

**Practice - Eigenvalues and Eigenvectors**

Compute the eigenvalues and determine if the matrices are diagonalizable.

$$C = \begin{bmatrix} 1 & 6 & 0 \\ 0 & 2 & 1 \\ 0 & 1 & 2 \end{bmatrix}$$

$$D = \begin{bmatrix} 4 & 0 & -2 \\ 2 & 5 & 4 \\ 0 & 0 & 5 \end{bmatrix}$$