## EIGENVECTORS AND EIGENVALUES FOR 2x2 MATRICES

EXERCISE 1: Find the eigenvalues of the following 2x2 malnes

a) 
$$A = \begin{bmatrix} 0 & 1 \\ -2 & -3 \end{bmatrix}$$

b) 
$$B = \begin{bmatrix} 2 & 2 \\ 5 & -1 \end{bmatrix}$$

EXERCISE 2: Find the eigenvectors of the following 2x2 matrices

a) 
$$A = \begin{bmatrix} 0 & 1 \\ -2 & -3 \end{bmatrix}$$

b) 
$$\beta = \begin{bmatrix} 2 & 2 \\ 5 & -1 \end{bmatrix}$$

EXERCISE 3: Find the eigenvalues and eigenvectors of the following

$$C = \begin{bmatrix} 2 & 2 \\ 1 & 3 \end{bmatrix}$$