MAU22E01 2020 (SF Engineers & MSISS & MEMS)

Sheet 8

Assignment sheet - will be marked - due next Monday, December 7

Exercise 1

Find the eigenvalues and corresponding eigenvectors of the following matrix:

$$A = \begin{pmatrix} 1 & 2 & 1 \\ 0 & 6 & 4 \\ 0 & 3 & 2 \end{pmatrix}.$$

Exercise 2

For A as in Exercise 1, find a matrix P that diagonalizes A and determine $D = P^{-1}AP$. Check your work by showing PD = AP.