

Math 4A Week 9 – December 1, 2014

1. Find the determinant of A .

$$A = \begin{bmatrix} 1 & 2 & 3 \\ 4 & 5 & 6 \\ 3 & 4 & 5 \end{bmatrix}$$

2. What are eigenvectors and eigenvalues?

3.

$$B = \begin{bmatrix} 1 & 0 & 3 \\ 0 & -1 & 0 \\ 0 & 0 & 1 \end{bmatrix}$$

- (i). Find the eigenvalues of B .
- (ii). Find the eigenvectors corresponding to the eigenvalues from (i).