

Name: _____ Sort #: _____

Worksheet 13

Eigenvalues & Eigenvectors

MATH 2250, Fall 2018

1. Find the characteristic polynomial and then the eigenvalues and corresponding eigenvectors of the matrix

$$A = \begin{bmatrix} 5 & 3 \\ 3 & 5 \end{bmatrix}$$

2. Find the characteristic polynomial and then the eigenvalues and corresponding eigenvectors of the matrix

$$B = \begin{bmatrix} 5 & -2 & 3 \\ 0 & 1 & 0 \\ 6 & 7 & 2 \end{bmatrix}$$