

MATH 320, Spring 2013, Assignment 9

Textbook Questions

Section 6.1 Find the eigenvalues and associated eigenvectors of the given matrix A .

#4

$$\begin{bmatrix} 4 & -3 \\ 2 & -1 \end{bmatrix}$$

#10

$$\begin{bmatrix} 9 & -10 \\ 2 & 0 \end{bmatrix}$$

#18

$$\begin{bmatrix} 1 & 0 & 0 \\ -6 & 8 & 2 \\ 12 & -15 & -3 \end{bmatrix}$$

Section 6.1, #34 Show that λ is an eigenvalue of the invertible matrix A if and only if λ^{-1} is an eigenvalue of A^{-1} . Are the associated eigenvectors the same?