Problem Set 10, Math 54-Lec 3, Linear Algebra, Fall 2017

September 29th, 2017

Problem 1 Find the eigenvalues of the matrix $A = \begin{bmatrix} 4 & -3 \\ 2 & -1 \end{bmatrix}$, and find a basis for each eigenspace.

Problem 2 Let $A = \begin{bmatrix} a & b \\ c & d \end{bmatrix}$ where $a + b = c + d$. Find the possible eigenvalues of A.