

Math 3013 Linear Algebra, Spring 2011
Quiz 3

Mar. 24, 2011

1. Let $A = \begin{bmatrix} 2 & 1 & 1 \\ 0 & 2 & 0 \\ 0 & -1 & 1 \end{bmatrix}$.

- (1) Find the eigenvalues and eigenvectors of A . (5 points)
- (2) Is A diagonalizable? If yes, write A in the form of PDP^{-1} where D is a diagonal matrix. (5 points)