MATH 205A,B - LINEAR ALGEBRA
FALL 2015

QUIZ 8

NAME: **Section:**(Circle one) A(8 : 00) B(9 : 30)

Show ALL your work CAREFULLY.

Let

$$A = \begin{bmatrix} 6 & -3 \\ 2 & 1 \end{bmatrix}.$$

(a) Find the eigenvalues of A.

(b) For each of the eigenvalue(s) found in (a), find the corresponding eigenspace.

(c) Is A diagonalizable? If so, find an invertible matrix P such that $P^{-1}AP$ is diagonal.

Date: November 11, 2015.