Name: _____

Math 260
Spring 2013, Term 122

Quiz 7 Section 04

SID: _____

Serrial Number: _____

Instructions: Show Your Work!

(10^{pts}) **1.** Let

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

Is the matrix A diagonalizable? If it is, find a diagonalizing matrix P and a diagonal matrix D such that $P^{-1}AP = D$.