

Name:
Student ID:

Tuesday section time:

Math 20F - Linear Algebra - Winter 2003

Quiz #6 $\frac{6}{10}$ — March 11

Do not hand in this quiz: it is for self-assessment.

Try this quiz without referring to the answers (on back of paper copy) first!

1. Let $A = \begin{pmatrix} 1 & 2 & 1 \\ 0 & 2 & 0 \\ 0 & 0 & 4 \end{pmatrix}$.

Find all the eigenvariables of A , and an associated eigenvector for each eigenvector. Check your answers by computing $A\mathbf{x}$ for each eigenvector \mathbf{x} .

2. Repeat the above problem with $A = \begin{pmatrix} 1 & 3 \\ 3 & 1 \end{pmatrix}$.