

## Math 308 E, Spring 2018 quiz 6

You have 5 minutes to complete the quiz. This quiz is out of 10 points.

Name: \_\_\_\_\_

Consider the 3 by 3 matrix

$$A = \begin{bmatrix} 0 & 1 & 3 \\ 4 & 0 & 2 \\ 0 & 0 & 1 \end{bmatrix}$$

1. (6 points) What are the eigenvalues of  $A$ ?
2. (4 points) Give any eigenvalue-eigenvector pair  $(v, \lambda)$  for  $A$ .
3. (For glory) Is  $A$  diagonalizable?