QUIZ 8 Math 304-06   Print your name _____
Nov. 6, 2023

No consultation!—that includes no electronics.

(1) (20 points) Find the eigenvalues of A. For each eigenvalue, find a basis for the eigenspace. (You may work on the back below the line.)

$$A = \begin{bmatrix} 1 & 0 & 1 \\ 0 & 1 & 1 \\ 0 & 0 & 5 \end{bmatrix}$$

PLEASE TURN OVER FOR QUESTION 2

(2) (10 points) Are the matrices B and C similar? Give a valid reason and circle your answer:

Yes   No

The matrices: $B = \begin{bmatrix} 2 & 0 \\ 0 & 3 \end{bmatrix}$, $C = \begin{bmatrix} 2 & 4 \\ 1 & 1 \end{bmatrix}$.