

Name: \_\_\_\_\_ ID #: \_\_\_\_\_

As always you need to show your work. Fill in the appropriate blanks

1. The characteristic equation of a matrix A is = 0 .

2. Eigenvalues are roots of = 0 .

3. The char eqn of  $A = \begin{pmatrix} 3 & 2 \\ 2 & 0 \end{pmatrix}$  is = 0 with evals  .

4. The char eqn of  $A = \begin{pmatrix} 3 & 2 \\ 2 & 3 \end{pmatrix}$  is = 0 with evals

5. The char eqn of  $A = \begin{pmatrix} 6 & 0 & 0 \\ 0 & 3 & 2 \\ 0 & -2 & 3 \end{pmatrix}$  is = 0 with evals

6. The char eqn of  $A = \begin{pmatrix} 6 & 0 & 0 \\ 0 & 3 & 2 \\ 1 & 1 & 0 \end{pmatrix}$  is = 0 with evals

