

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