## Quiz \#9

Directions: Carefully read each question below and answer to the best of your ability in the space provided. Your answer to problems should be written in a clear and concise manner.
You MUST show your work to receive full credit!

1. (5 points) Find the eigenvalues of the following matrix:

$$
A=\left[\begin{array}{cc}
2 & \frac{3}{2} \\
2 & 0
\end{array}\right]
$$

2. (5 points) Find the least squares solution to the following system:

$$
\left[\begin{array}{cc}
1 & -2 \\
1 & 0 \\
1 & 2
\end{array}\right]\left[\begin{array}{l}
x_{1} \\
x_{2}
\end{array}\right]=\left[\begin{array}{l}
1 \\
2 \\
4
\end{array}\right]
$$

Name:
Section (circle one): 001002

| Question: | 1 | 2 | Total |
| :--- | :---: | :---: | :---: |
| Points: | 5 | 5 | 10 |
| Score: |  |  |  |

