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:

$$\left[\begin{array}{cc} 1 & -2 \\ 1 & 0 \\ 1 & 2 \end{array}\right] \left[\begin{array}{c} x_1 \\ x_2 \end{array}\right] = \left[\begin{array}{c} 1 \\ 2 \\ 4 \end{array}\right]$$

Name: _					
Section ((circle one)	:	001	002	

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

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