Quiz 9 Math 230

1. Find all eigenvalues of the matrix

$$A = \left[ \begin{array}{cc} -10 & -4 \\ 30 & 12 \end{array} \right].$$

Then find *all* eigenvectors associated with each eigenvalue. If A is diagonalizable, then diagonalize it. If not, explain why not. Finally, find  $e^A$  (don't have to multiply out all matrices in your answer).