ENG EC/ME/SE 501:

Mini Quiz I

1. Find the Jordan Normal Form $J_A$ of

$A = \left( \begin{array}{ccc} -2 & -5 & -4 \\ 1 & 2 & 2 \\ 1 & 2 & 2 \end{array} \right)$. 

2. For the matrix in the previous question, find a nonsingular matrix (change of basis) $U$ such that

$U^{-1} \cdot A \cdot U = J_A$. 

Show all work.