Quiz No:5 (Math202) Name:_____ID_____

(a): Solve the homogeneous system $X' = \begin{pmatrix} 5 & -4 & 0 \\ 1 & 0 & 2 \\ 0 & 2 & 5 \end{pmatrix} X$ by giving general solution. (The

eigenvalues of the matrix are: $\lambda_1 = 0$, $\lambda_2 = 5 = \lambda_3$)