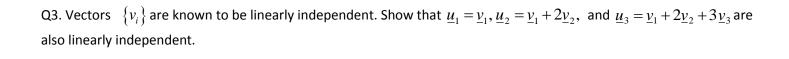
Q1. Find rank of the matrix  $\begin{pmatrix} 1 & 2 & 3 \\ 1 & 5 & -9 \\ 2 & 5 & 2 \end{pmatrix}$ 

Q2. Find a basis of the subspace of  $\Re^4$  for which the set of vectors (a,b,c,d) are related by a=3c and b=4d



Q4. Solve the IVP:  $2\frac{dy}{dx} + \frac{2}{x}y = \frac{e^x}{2x}$  y(1) = 2