

Math 3280 Worksheet 19:

More second order linear nonhomogeneous ODEs with constant coefficients

Group members (2 to 4): _____

(1) Solve the initial value problem $4y'' - 12y' + 9y = e^t$, $y(0) = 0$, $y'(0) = 1$.

(2) Find the eigenvalues and eigenvectors for the matrix

$$A = \begin{pmatrix} 1 & 1 & 0 \\ 4 & 1 & 0 \\ 0 & 0 & 2 \end{pmatrix}$$