## Matlab Assignment \# 2

- Go through the help sheet before attempting the assignment.
- For each question
o write the MATLAB commands for finding the roots of characteristic equation
o use roots to write the general solution of ODE

1. Solve $y^{\prime \prime \prime}-3 y^{\prime \prime}+3 y^{\prime}-y=0$.

Use Matlab to find roots of the characteristic equation.
Answer:
2. Solve $y^{(4)}+2 y^{\prime \prime}-y^{\prime}+2 y=0$.

Use Matlab to find roots of characteristic equation.
Answer:
3. Solve $2 y^{(4)}+3 y^{\prime \prime \prime}-16 y^{\prime \prime}+15 y^{\prime}-4 y=0$.

Use Matlab to find roots of characteristic equation.
Answer:

