

Section:

Ser. #:

## Matlab Assignment # 2

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

1. Solve  $y''' - 3y'' + 3y' - y = 0$ .

Use Matlab to find roots of auxiliary equation.

Answer:

2. Solve  $y^{(4)} + 2y'' - y' + 2y = 0$ .

Use Matlab to find roots of auxiliary equation.

Answer:

3. Solve  $2y^{(4)} + 3y''' - 16y'' + 15y' - 4y = 0$ .

Use Matlab to find roots of auxiliary equation.

Answer: