

QUIZ#4 Math202-sec8.Net Time Allowed: 30 minutes

Name:

ID #:

Serial #:

Exercise1:(04 points)

Find the recurrence relation determining the coefficients of the power series solution for the (DE): $y'' - xy' + 3y = 0$.

Exercise2:(06 points)

Solve the homogeneous system:

$$\begin{cases} \frac{dx}{dt} = y + z \\ \frac{dy}{dt} = 2x + y \\ \frac{dz}{dt} = -z \end{cases} \quad (1)$$