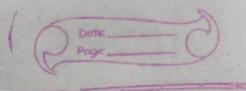
Assignment



1) use the newton-Raphson method to obtain a root, correct to three decimal places, of each of the following equations

Find the cubic polynomial which takes

the following values:

y(1)=24, y(3)=120, y(5)=336 and

y(7)=720. Hence, or otherwise, obtain

the value of y(8).

3) Factorize the mateix

A = 2 3 1

1 2 3 into Lu form.

3 1 2 J

Use gauss elimination to solve the system

2x + 4 + 7 + 7 = 10 3x + 2y + 37 = 18x + 4y + 97 = 16

- 5) Solve the equations

 - x + 24 +37 = 6
 - 37 + 4 + 27 = 8

by the method of LU decomposition

- 6) Find the eigenvalues of the matrix and inverse of the A = 5 0 1 matrix.
 - (P) use Gass Gayss-Jordon method to solve the system

4x + 3xg-73=6 3x1 + 5x9 + 3x3 = 4 4 + 7+ 1 = 1

(8) Solve the System

10x +2y+2=9 2x + 20y - 2z = -44 -2x + 3y + 10z = 22

by Jacobi's method.

(g) Solve the system, given in problem (g) by kays - Seidel method.

