Basics of Mathematical Software

Exercise 13

Solve by means of the Mathcad software:

1. Using the Given-Find-method find the solutions to the following system of equations:

    $$\begin{cases} x^2 + y^2 = 25 \\ x^2 + x + y = 7 \end{cases}$$

    First plot the curves. (Hint: This system of equations has 4 solutions).

2. Solve Problem 1 by means of the Newton-Raphson procedure.