

SOLUTION OF THE EQUATION AND CHARTING IN MATHEMATICAL PACKAGE SCILAB

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There are many programs that can calculate various mathematical operations. One of these programs is Scilab .This package of applied mathematics program, representing a powerful open environment for engineering and scientific calculations. Scilab contains a variety of mathematical functions.The system is available for solutions of equationsand graph plotting. Scilab has distinctive features that give their advantages. It's free and small size.

This paper discusses various methods for solving equations and systems, as well as the creation and editing of graphs of functions.The methods for finding the roots of polynomials of different degrees, methods for solving linear and nonlinear equations, transcendental equations, graphical solution of various equations.

Besides the solution of equations considered methods for solving systems of linear algebraic equations.Discusses how making: Cramer method, Gauss, linsolve, matrix. The theorem of existence and uniqueness of solutions of systems of linear algebraic equations used. The system is available a variety of tools to build and edit: 2D and 3D graphs. Different methods of constructing and editing two-dimensional and three-dimensional graphs of functions.

As a result, we can conclude that Scilab provides great opportunities for creating and editing graphics and surfaces, solving linear and nonlinear equations and systems. Although Scilab is a free product compared to Matcad, Matlab and Matematika, its computational capabilities quite correspond to the potential of computer systems professional level.