



Chapter 1:

Getting Started

- 1.1 Introduction to MATLAB
- 1.2 Coding in MATLAB
- 1.3 Calling Functions
- 1.4 Symbolic Computation
- 1.5 Using MuPAD Notebook
- 1.6 MATLAB and Simulink
- 1.7 Data Input and Output
- 1.8 Solved Problems

Chapter 2:

Arrays and Matrices

- 2.1 Matrix Manipulation
- 2.2 System of Linear Equations
- 2.3 Roots of Equations
- 2.4 Solved Problems

Chapter 3:

Two Dimensional Plots

- 3.1 Basic Plotting Functions
- 3.2 Formatting a Plot
- 3.3 Basic Plotting Commands
- 3.4 Animating Graphics Objects
- 3.5 Solved Problems

Chapter 4:

Programming and Scripts

- 4.1 Conditional Control
- 4.2 Loop Control
- 4.3 Functions
- 4.4 Solved Problems

Chapter 5:

Optimization Techniques

- 5.1 Unconstrained Optimization
- 5.2 Constrained Optimization
- 5.3 Linear Programming
- 5.4 MultipleObjective Optimization

APPENDIX: Creating Standalone Applications