



# Linear Algebra and Differential Equations Using MATLAB

By Golubitsky, Martin; Dellnitz, Michael

Cengage Learning, 1999. Book Condition: New. Brand New, Unread Copy in Perfect Condition. A+ Customer Service!

Summary: 1. PRELIMINARIES Vectors and Matrices / MATLAB / Special Kinds of Matrices / The Geometry of Vector Operations 2. SOLVING LINEAR EQUATIONS Systems of Linear Equations and Matrices / The Geometry of Low-Dimensional Solutions / Gaussian Elimination / Reduction to Echelon Form / Linear Equations with Special Coefficients / Uniqueness of Reduced Echelon Form 3. MATRICES AND LINEARITY Matrix Multiplication of Vectors / Matrix Mappings / Linearity / The Principle of Superposition / Composite and Multiplication of Matrices / Properties of Matrix Multiplication / Solving Linear Systems and Inverses / Determinants of  $2 \times 2$  Matrices 4. SOLVING ORDINARY DIFFERENTIAL EQUATIONS A Single Differential Equation / Graphing Solutions to Differential Equations / Phase Space Pictures and Equilibria / Separation of Variables / Uncoupled Linear Systems of Two Equations / Coupled Linear Systems / The Initial Value Problem and Eigenvectors / Eigenvalues of  $2 \times 2$  Matrices / Initial Value Problems Revisited / Markov Chains 5. VECTOR SPACES Vector Spaces and Subspaces / Construction of Subspaces / Spanning Sets and MATLAB / Linear Dependence and Linear Independence / Dimension and Bases / The Proof...



**READ ONLINE**  
[ 7.08 MB ]

## Reviews

*Very useful to all class of individuals. It is amongst the most awesome publication i actually have read through. You will like just how the blogger create this pdf.*

-- Lisa Jacobs

*Great electronic book and helpful one. Of course, it is play, still an interesting and amazing literature. I am just delighted to inform you that here is the finest ebook i have got go through in my own daily life and might be he finest pdf for actually.*

-- Lora Johns III