



Integral Calculus and Differential Equations Using Mathematica (Paperback)

By Cesar Perez Lopez

Createspace Independent Publishing Platform, United States, 2016. Paperback. Book Condition: New. 254 x 203 mm. Language: English . Brand New Book ***** Print on Demand *****.This book provides all the material needed to work on Integral Calculus and Differential Equations using Mathematica. It includes techniques for solving all kinds of integral and its applications for calculating lengths of curves, areas, volumes, surfaces of revolution. With Mathematica is possible solve ordinary and partial differential equations of various kinds, and systems of such equations, either symbolically or using numerical methods (Euler s method, the Runge-Kutta method, .). It also describes how to implement mathematical tools such as the Laplace transform, orthogonal polynomials, and special functions (Airy and Bessel functions), and find solutions of differential equations in partial derivatives. The main content of the book is as follows:
PRACTICAL INTRODUCTION TO MATHEMATICA 1.1
CALCULATION NUMERIC WITH MATHEMATICA 1.2 SYMBOLIC CALCULATION WITH MATHEMATICA 1.3 GRAPHICS WITH MATHEMATICA 1.4 MATHEMATICA AND THE PROGRAMMING INTEGRATION AND APPLICATIONS 2.1 INDEFINITE INTEGRALS 2.1.1 Immediate integrals 2.2 INTEGRATION BY SUBSTITUTION (OR CHANGE OF VARIABLES) 2.2.1 Exponential, logarithmic, hyperbolic and inverse circular functions 2.2.2 Irrational functions, binomial integrals 2.3 INTEGRATION BY PARTS 2.4 INTEGRATION BY REDUCTION AND CYCLIC INTEGRATION DEFINITE...

Reviews

Extensive information for book fans. It is written in basic words and never hard to understand. It is extremely difficult to leave it before concluding, once you begin to read the book.

-- **Otis Wisoky**

This publication is great. It is full of wisdom and knowledge You will not really feel monotony at any time of the time (that's what catalogs are for relating to when you ask me).

-- **Dr. Everett Dicki DDS**