1. **Record Nr.** UNICAMPANIAVAN00277897

   Titolo Mathematics of Public Health : Proceedings of the Seminar on the Mathematical Modelling of COVID-19 / V. Kumar Murty, Jianhong Wu editors

   Pubbl/distr/stampa Cham, : Springer, 2022

   Descrizione fisica x, 353 p. : ill. ; 24 cm

   Soggetti 00B25 - Proceedings of conferences of miscellaneous specific interest [MSC 2020]
   92-XX - Biology and other natural sciences [MSC 2020]
   92D30 - Epidemiology [MSC 2020]

   Lingua di pubblicazione Inglese

   Formato Materiale a stampa

   Livello bibliografico Monografia

2. **Record Nr.** UNINA9911006703703321

   Autore DuChateau Paul

   Titolo Advanced Mathematics for Engineers and Scientists

   Pubbl/distr/stampa Newburyport, : Dover Publications, 2013

   ISBN 9781523109579
   1523109572
   9780486141596
   0486141594

   Edizione [1st ed.]

   Descrizione fisica 1 online resource (720 p.)

   Collana Dover Books on Mathematics

   Disciplina 515

   Soggetti Mathematical analysis
   Engineering & Applied Sciences
   Applied Mathematics

   Lingua di pubblicazione Inglese

   Formato Materiale a stampa

   Livello bibliografico Monografia

   Note generali Description based upon print version of record.

Nota di contenuto	DOVER BOOKS ON MATHEMATICS; Title Page; Dedication; Copyright Page; Table of Contents; Preface; 1 - Systems of Linear Algebraic Equations; SYSTEMS OF SIMULTANEOUS LINEAR EQUATIONS; LINEAR ALGEBRA; SOLVED PROBLEMS; 2 - Algebraic Eigenvalue Problems; DETERMINANTS; EIGENVALUES AND EIGENVECTORS; SOLVED PROBLEMS; 3 - Multivariable Calculus; MULTIVARIABLE DIFFERENTIAL CALCULUS; MULTIVARIABLE INTEGRAL CALCULUS; SOLVED PROBLEMS; 4 - Ordinary Differential Equations: Linear Initial Value Problems; INITIAL VALUE PROBLEMS FOR SINGLE EQUATIONS; SOLVED PROBLEMS 5 - Nonlinear Ordinary Differential EquationsNONLINEAR EQUATIONS; NONLINEAR SYSTEMS; SOLVED PROBLEMS; 6 - Linear Boundary Value Problems; LINEAR BOUNDARY VALUE PROBLEMS; STURM-LIOUVILLE PROBLEMS; A FUNCTION SPACE; SINGULAR STURM-LIOUVILLE PROBLEMS; SOLVED PROBLEMS; 7 - Fourier Series and Eigenfunction Expansions; FORMAL PROPERTIES OF FOURIER SERIES; GENERALIZED FOURIER SERIES; SOLVED PROBLEMS; Convergence of Fourier Series; 8 - Integral Transforms; THE FOURIER TRANSFORM; LAPLACE TRANSFORM; SOLVED PROBLEMS; 9 - Linear Problems in Partial Differential Equations; PARTIAL DIFFERENTIAL EQUATIONS SOLVED PROBLEMS10 - Linear and Nonlinear Partial Differential Equations; FIRST ORDER EQUATIONS; SOLVED PROBLEMS; 11 - Functional Optimization and Variational Methods; FUNCTIONAL OPTIMIZATION; SOLVED PROBLEMS; 12 - Finite Difference Methods for Differential Equations; ORDINARY DIFFERENTIAL EQUATIONS; PARTIAL DIFFERENTIAL EQUATIONS; SOLVED PROBLEMS; 13 - Introduction to the Finite Element Method; APPROXIMATION METHODS; THE FINITE ELEMENT METHOD; SOLVED PROBLEMS; Index
Sommario/riassunto	This book can be used as either a primary text or a supplemental reference for courses in applied mathematics. Its core chapters are devoted to linear algebra, calculus, and ordinary differential equations. Additional topics include partial differential equations and approximation methods. Each chapter features an ample selection of solved problems. These problems were chosen to illustrate not only how to solve various algebraic and differential equations but also how to interpret the solutions in order to gain insight into the behavior of the system modeled by the equation. In addition to th