

1. Record Nr.	UNINA9910437763303321
Autore	Anastassiou George A. <1952->
Titolo	Intelligent routines : solving mathematical analysis with Matlab, Mathcad, Mathematica and Maple // George A. Anastassiou and Iuliana F. Iatan
Pubbl/distr/stampa	Heidelberg ; ; New York, : Springer, 2012, c2013
ISBN	3-642-28475-2
Edizione	[1st ed. 2013.]
Descrizione fisica	1 online resource (591 p.)
Collana	Intelligent systems reference library, , 1868-4394 ; ; 39
Altri autori (Persone)	IatanIuliana F
Disciplina	515 515.02855369 515/.0285 515/.0285/5369
Soggetti	Mathematical analysis - Computer programs Mathematical analysis - Data processing
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Description based upon print version of record.
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Sequences and Series of Numbers -- Power Series -- Differentiation Theory of the Functions -- Fundamentals of Field Theory -- Implicit Functions -- Terminology About Integral Calculus -- Equations and Systems of Linear Ordinary Differential Equations -- Line and Double Integral Calculus -- Triple and Surface Integral Calculus.
Sommario/riassunto	Real Analysis is a discipline of intensive study in many institutions of higher education, because it contains useful concepts and fundamental results in the study of mathematics and physics, of the technical disciplines and geometry. This book is the first one of its kind that solves mathematical analysis problems with all four related main software Matlab, Mathcad, Mathematica and Maple. Besides the fundamental theoretical notions, the book contains many exercises, solved both mathematically and by computer, using: Matlab 7.9, Mathcad 14, Mathematica 8 or Maple 15 programming languages. The book is divided into nine chapters, which illustrate the application of the mathematical concepts using the computer. Each chapter presents the fundamental concepts and the elements required to solve the problems contained in that chapter and finishes with some

problems left to be solved by the readers. The calculations can be verified by using a specific software such as Matlab, Mathcad, Mathematica or Maple.
