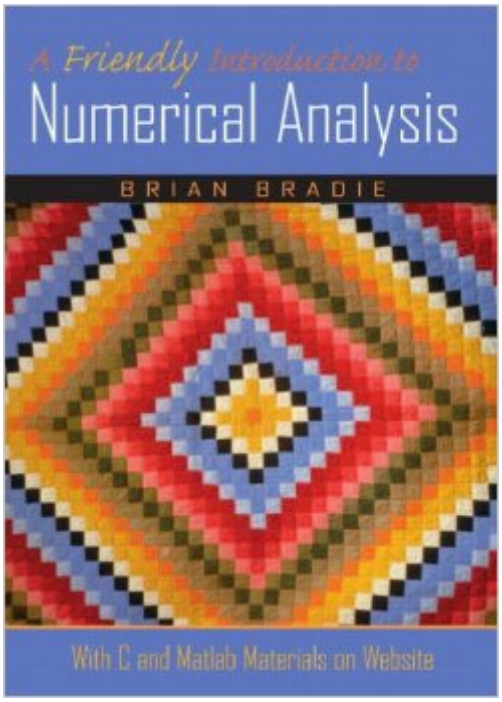
A Friendly Introduction To Numerical Analysis.



Synopsis

This reader-friendly introduction to the fundamental concepts and techniques of numerical analysis/numerical methods develops concepts and techniques in a clear, concise, easy-to- read manner, followed by fully-worked examples. Application problems drawn from the literature of many different fields prepares readers to use the techniques covered to solve a wide variety of practical problems. Rootfinding. Systems of Equations. Eigenvalues and Eigenvectors. Interpolation and Curve Fitting. Numerical Differentiation and Integration. Numerical Methods for Initial Value Problems of Ordinary Differential Equations. Second-Order One-Dimensional Two-Point Boundary Value Problems. Finite Difference Method for Elliptic Partial Differential Equations. Finite Difference Method for Parabolic Partial Differential Equations. Finite Difference Method for Hyperbolic Partial Differential Equations and the Convection-Diffusion Equation. For anyone interested in numerical analysis/methods and their applications in many fields

Book Information

Paperback: 976 pages

Publisher: Pearson; 1 edition (May 6, 2005)

Language: English

ISBN-10: 0130130540

ISBN-13: 978-0130130549

Product Dimensions: 7.1 x 2.2 x 9.2 inches

Shipping Weight: 3.3 pounds (View shipping rates and policies)

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Best Sellers Rank: #172,179 in Books (See Top 100 in Books) #51 inÂ Books > Science & Math > Mathematics > Pure Mathematics > Number Theory #104 inÂ Books > Science & Math > Mathematics > Mathematical Analysis #977 inÂ Books > Computers & Technology > Computer Science

Customer Reviews

This book is decent in terms of content. Unfortunately it is poorly edited. The author is often verbose, which confuses topics that are otherwise straightforward. That being said, the book provides a thorough overview of very technical subjects and the author provides electronic resources in the form of code and exercise hints. I would give this book three stars except that the paperback version is poorly bound. It will fall apart.

Tends to unnecessarily complicate some explanations and gives poor examples. This book works better to review knowledge rather than to actually try and learn from it, in which case the price isn't worth it. Stick to Google/Youtube or find a better book.

It is nearly impossible for me to convey the degree of pain associated with trying to read this book. For a book entitled, A friendly introduction, it is anything but friendly. While the material may be of introductory level, in the field of numerical analysis, to someone with a general college math background, this book is just ... confusing. It makes rapid jumps and moves through topics very quickly with few examples. Given time and background, you can pick up on where the author went, but for "a friendly" introduction, it is a waste. I have seen most of the concepts presented in this book scattered through my other math books, whose examples are clearer and easier to follow. If you wish to explore this field of math, start somewhere else.The author would have done better to limit the topics and give more detailed explanations of each, instead of trying to cram a taste of the entire field into one .... door stop.

I purchased this text for a computer science class on computational methods. I had studied Numerical Methods before and wanted a refresher. This book was not the solution. Besides the poor binding for such a thick book which is not page loose, the book is an incoherent rambling of mathematical symbols that puts down no simple laws or understandable examples. I read 200 pages before I finally gave up on trying to learn something from it. I can't think of for whom this book would be useful.I suggest you try a book on Linear Algebra which you'll likely find at a good university library. You might actually learn something. Avoid this overpriced book.

I use this book for my lectures on numerical analysis for engineers, it is full of beautiful examples, I like it a lot.

Normally I'd say this book is 2 stars. The online content from the website (included in the intro) made it bearable. But the construction of this book is horrible. I went through 3 during the semester (2 replacements from manufacturer). Pages would fall out if you even TRY to open it all the way; so reading it was a trick with it's horrible binding.

it's a didactic book

Eco-Friendly Cleaning: Money Saving Solutions for a Clean, Green, All-Natural, Non-Toxic, Eco-Friendly Home (eco-friendly, sustainability, homesteading, ... natural cleaning, green home, non-toxic) A Friendly Introduction to Numerical Analysis. Numerical Techniques for Direct and Large-Eddy Simulations (Chapman & Hall/CRC Numerical Analysis and Scientific Computing Series) An Introduction to Numerical Methods and Analysis Introduction to Numerical Analysis (Texts in Applied Mathematics) Selected Unsolved Problems in Coding Theory (Applied and Numerical Harmonic Analysis) Stochastic Models, Information Theory, and Lie Groups, Volume 2: Analytic Methods and Modern Applications (Applied and Numerical Harmonic Analysis) Numerical Analysis Elementary Numerical Analysis Numerical Methods: Design, Analysis, and Computer Implementation of Algorithms Numerical Analysis for Engineers: Methods and Applications, Second Edition (Textbooks in Mathematics) Introduction to the Numerical Modeling of Groundwater and Geothermal Systems: Fundamentals of Mass, Energy and Solute Transport in Poroelastic Rocks (Multiphysics Modeling) Riemann Solvers and Numerical Methods for Fluid Dynamics: A Practical Introduction A Friendly Introduction to Group Theory A Friendly Introduction to Number Theory (4th Edition) (Featured Titles for Number Theory) Friendly Introduction to Number Theory, A, Modern Fortran Explained (Numerical Mathematics and Scientific Computation) FORTRAN 77 and Numerical Methods for Engineers and Scientists Numerical Recipes Example Book (FORTRAN) 2nd Edition Traffic Flow Theory: Characteristics, Experimental Methods, and Numerical Techniques