


Differential Equations: A Primer for Scientists and Engineers (Springer Undergraduate Texts in Mathematics and Technology)

By Christian Constanda

 Download

 Read Online

Differential Equations: A Primer for Scientists and Engineers (Springer Undergraduate Texts in Mathematics and Technology) By Christian Constanda

Differential Equations for Scientists and Engineers is a book designed with students in mind. It attempts to take a concise, simple, and no-frills approach to differential equations. The approach used in this text is to give students extensive experience in main solution techniques with a lighter emphasis on the physical interpretation of the results. With a more manageable page count than comparable titles, and over 400 exercises that can be solved without a calculating device, this book emphasizes the understanding and practice of essential topics in a succinct fashion. At the end of each worked example, the author provides the Mathematica commands that can be used to check the results and where applicable, to generate graphical representations. It can be used independently by the average student, while those continuing with the subject will develop a fundamental framework with which to pursue more advanced material. This book is designed for undergraduate students with some basic knowledge of precalculus algebra and a first course in calculus.

 [Download Differential Equations: A Primer for Scientists an ...pdf](#)

 [Read Online Differential Equations: A Primer for Scientists ...pdf](#)

Differential Equations: A Primer for Scientists and Engineers (Springer Undergraduate Texts in Mathematics and Technology)

By Christian Constanda


Differential Equations: A Primer for Scientists and Engineers (Springer Undergraduate Texts in Mathematics and Technology) By Christian Constanda

Differential Equations for Scientists and Engineers is a book designed with students in mind. It attempts to take a concise, simple, and no-frills approach to differential equations. The approach used in this text is to give students extensive experience in main solution techniques with a lighter emphasis on the physical interpretation of the results. With a more manageable page count than comparable titles, and over 400 exercises that can be solved without a calculating device, this book emphasizes the understanding and practice of essential topics in a succinct fashion. At the end of each worked example, the author provides the Mathematica commands that can be used to check the results and where applicable, to generate graphical representations. It can be used independently by the average student, while those continuing with the subject will develop a fundamental framework with which to pursue more advanced material. This book is designed for undergraduate students with some basic knowledge of precalculus algebra and a first course in calculus.

Differential Equations: A Primer for Scientists and Engineers (Springer Undergraduate Texts in Mathematics and Technology) By Christian Constanda Bibliography

- Sales Rank: #989718 in Books
- Brand: Brand: Springer
- Published on: 2013-05-22
- Original language: English
- Number of items: 1
- Dimensions: 10.00" h x .69" w x 7.01" l, 1.55 pounds
- Binding: Hardcover
- 263 pages

 [Download Differential Equations: A Primer for Scientists an ...pdf](#)

 [Read Online Differential Equations: A Primer for Scientists ...pdf](#)

Download and Read Free Online Differential Equations: A Primer for Scientists and Engineers (Springer Undergraduate Texts in Mathematics and Technology) By Christian Constanda

Editorial Review

Review

From the reviews:

“The author of this book does a very creditable job of providing the basic material of ordinary differential equations. ... The book is largely aimed at average students in mathematics, science or engineering. The author suggests that stronger students can use the text as a bridge to more specialized books or more advanced courses. ... There are many exercises.” (William J. Satzer, MAA Reviews, November, 2013)

“The author writes this book respecting his readers and caring about the way of exposing his ideas. The book is written in a style that uses words as a bonding agent between consecutive mathematical passages, which creates a pleasant and comfortable lecture. ... The book contains 232 worked examples and 810 exercises. ... We kindly recommend this book to future engineers and scientists as well as to all those interested in the topic, who encounter differential equations in their professional work.” (Alexandru Negrescu, zbMATH, Vol. 1272, 2013)

From the Back Cover

Differential Equations: A Primer for Scientists and Engineers is a textbook designed with the needs of today's student in mind. It is the ideal textbook for a first course in elementary differential equations for future engineers and scientists, including mathematicians. This book is accessible to anyone who has a basic knowledge of precalculus algebra and differential and integral calculus. Its carefully crafted text adopts a concise, simple, no-frills approach to differential equations, which helps students acquire a solid experience in many classical solution techniques. With a lighter accent on the physical interpretation of the results, a more manageable page count than comparable texts, a highly readable style, and over 800 exercises designed to be solved without a calculating device, this book emphasizes the understanding and practice of essential topics in a succinct yet fully rigorous fashion.

The book formally splits the "pure" and "applied" parts of the contents by placing the discussion of selected mathematical models in separate chapters. At the end of most of the 230 worked examples, the author provides the *Mathematica*® commands for verifying the results. The book can be used independently by the average student to learn the fundamentals of the subject, while those interested in pursuing more advanced material can regard it as an easily taken first step on the way to the next level. Additionally, practitioners who encounter differential equations in their professional work will find this text to be a convenient source of reference.

Other Springer publications by Christian Constanda: *Dude, Can you Count?* ISBN: 978-1-84882-538-3; *Stationary Oscillations of Elastic Plates*, ISBN: 978-0-8176-8340-8.

Christian Constanda, MS, PhD, DSc, is the holder of the Charles W. Oliphant Endowed Chair in Mathematical Sciences at the University of Tulsa, USA. He is also the Chairman of the International Consortium on Integral Methods in Science and Engineering (IMSE).

About the Author

Born and educated in Romania, Prof. Constanda is Emeritus Professor from the University of Strathclyde in Glasgow, Scotland. Christian Constanda currently holds the Charles W. Oliphant Endowed Chair in Mathematical Sciences at the University of Tulsa and the directorship of the Center for Boundary Integral Methods. He has been a prolific author/editor for Birkhauser and for Springer for many years. Constanda has authored several successful texts with CRC press and other publishers as well. His most recent Springer Copernicus title "Dude, Can you Count?" has sold 848 copies to date. Other authored volumes with Springer include "Variational and Potential Methods for a Class of Linear Hyperbolic Evolutionary Processes" (SMM). Prof. Constanda has published several edited volumes with Birkhauser.

Users Review

From reader reviews:

James Barclay:

The book Differential Equations: A Primer for Scientists and Engineers (Springer Undergraduate Texts in Mathematics and Technology) give you a sense of feeling enjoy for your spare time. You need to use to make your capable much more increase. Book can being your best friend when you getting pressure or having big problem with the subject. If you can make looking at a book Differential Equations: A Primer for Scientists and Engineers (Springer Undergraduate Texts in Mathematics and Technology) to become your habit, you can get much more advantages, like add your capable, increase your knowledge about many or all subjects. You may know everything if you like available and read a e-book Differential Equations: A Primer for Scientists and Engineers (Springer Undergraduate Texts in Mathematics and Technology). Kinds of book are a lot of. It means that, science guide or encyclopedia or other individuals. So , how do you think about this book?

Alva Sexton:

Information is provisions for anyone to get better life, information presently can get by anyone in everywhere. The information can be a expertise or any news even a problem. What people must be consider when those information which is in the former life are difficult to be find than now is taking seriously which one would work to believe or which one the resource are convinced. If you have the unstable resource then you have it as your main information it will have huge disadvantage for you. All of those possibilities will not happen inside you if you take Differential Equations: A Primer for Scientists and Engineers (Springer Undergraduate Texts in Mathematics and Technology) as your daily resource information.

Charlie Hartman:

The book untitled Differential Equations: A Primer for Scientists and Engineers (Springer Undergraduate Texts in Mathematics and Technology) contain a lot of information on this. The writer explains your girlfriend idea with easy means. The language is very simple to implement all the people, so do not necessarily worry, you can easy to read that. The book was published by famous author. The author gives you in the new period of literary works. It is possible to read this book because you can please read on your smart phone, or product, so you can read the book throughout anywhere and anytime. In a situation you wish to purchase the e-book, you can open up their official web-site and order it. Have a nice examine.

Laura Thibodeau:

Do you like reading a book? Confuse to looking for your chosen book? Or your book ended up being rare? Why so many problem for the book? But almost any people feel that they enjoy to get reading. Some people likes examining, not only science book but additionally novel and Differential Equations: A Primer for Scientists and Engineers (Springer Undergraduate Texts in Mathematics and Technology) or perhaps others sources were given information for you. After you know how the truly amazing a book, you feel desire to read more and more. Science e-book was created for teacher as well as students especially. Those textbooks are helping them to increase their knowledge. In additional case, beside science guide, any other book likes Differential Equations: A Primer for Scientists and Engineers (Springer Undergraduate Texts in Mathematics and Technology) to make your spare time far more colorful. Many types of book like this.

Download and Read Online Differential Equations: A Primer for Scientists and Engineers (Springer Undergraduate Texts in Mathematics and Technology) By Christian Constanda #JBSL320Q6V8

Read Differential Equations: A Primer for Scientists and Engineers (Springer Undergraduate Texts in Mathematics and Technology) By Christian Constanda for online ebook

Differential Equations: A Primer for Scientists and Engineers (Springer Undergraduate Texts in Mathematics and Technology) By Christian Constanda Free PDF d0wnl0ad, audio books, books to read, good books to read, cheap books, good books, online books, books online, book reviews epub, read books online, books to read online, online library, greatbooks to read, PDF best books to read, top books to read Differential Equations: A Primer for Scientists and Engineers (Springer Undergraduate Texts in Mathematics and Technology) By Christian Constanda books to read online.

Online Differential Equations: A Primer for Scientists and Engineers (Springer Undergraduate Texts in Mathematics and Technology) By Christian Constanda ebook PDF download

Differential Equations: A Primer for Scientists and Engineers (Springer Undergraduate Texts in Mathematics and Technology) By Christian Constanda Doc

Differential Equations: A Primer for Scientists and Engineers (Springer Undergraduate Texts in Mathematics and Technology) By Christian Constanda Mobipocket

Differential Equations: A Primer for Scientists and Engineers (Springer Undergraduate Texts in Mathematics and Technology) By Christian Constanda EPub