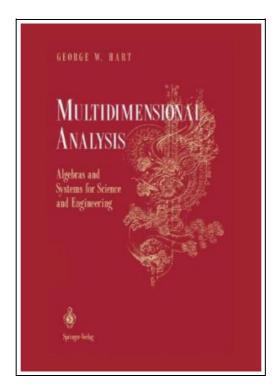
Multidimensional Analysis



Filesize: 7.45 MB

Reviews

This ebook may be worth getting. I actually have read through and i am sure that i am going to likely to read through again once more down the road. You will not sense monotony at whenever you want of your respective time (that's what catalogues are for relating to should you check with me).

(Mr. Golden Flatley)

MULTIDIMENSIONAL ANALYSIS



Book Condition: New. Publisher/Verlag: Springer, Berlin | Algebras and Systems for Science and Engineering | This book deals with the mathematical properties of dimensioned quantities, such as length, mass, voltage, and viscosity. Beginning with a careful examination of how one expresses the numerical results of a measurement and uses these results in subsequent manipulations, the author rigorously constructs the notion of dimensioned numbers and discusses their algebraic structure. The result is a unification of linear algebra and traditional dimensional analysis that can be extended from the scalars to which the traditional analysis is perforce restricted to multidimensional vectors of the sort frequently encountered in engineering, systems theory, economics, and other applications. | 0. Introductory.- 0.1 Physical Dimensions.- 0.2 Mathematical Dimensions.- 0.3 Overview.- Exercises.- 1. The Mathematical Foundations of Science and Engineering.- 1.1 The Inadequacy of Real Numbers.- 1.1.1 The Error of Substitution.- 1.1.2 The Problem with Linear Spaces.- 1.1.3 Nondimensionalization.- 1.1.3 Dimensioned Algebras.- 1.2 The Mathematics of Dimensioned Quantities.- 1.2.1 Axiomatic Development.- 1.2.2 Constructive Approach.- 1.2.3 Constraints on Exponentiation.- 1.2.4 The Dimensional Basis.- 1.2.5 Dimensional Logarithms.- 1.2.6 The Basis-Independence Principle.- 1.2.7 Symmetries of Dimensioned Quantities.- 1.2.8 Images.- 1.3 Conclusions.- Exercises.- 2. Dimensioned Linear Algebra.- 2.1 Vector Spaces and Linear Transformations.- 2.2 Terminology and Dimensional Inversion.- 2.3 Dimensioned Scalars.- 2.4 Dimensioned Vectors.- 2.5 Dimensioned Matrices.- Exercises.- 3. The Theory of Dimensioned Matrices.- 3.1 The Dimensional Freedom of Multipliable Matrices.- 3.2 Endomorphic Matrices and the Matrix Exponential.- 3.3 Square Matrices, Inverses, and the Determinant.- 3.4 Squarable Matrices and Eigenstructure.- 3.5 Dimensionally Symmetric Multipliable Matrices.- 3.6 Dimensionally Hankel and Toeplitz Matrices.- 3.7 Uniform, Half Uniform, and Dimensionless Matrices.- 3.8 Conclusions.- 3.A Appendix: The n + m ? 1 Theorem.- Exercises.- 4. Norms, Adjoints, and Singular Value Decomposition.- 4.1 Norms for Dimensioned Spaces.- 4.1.1 Wand Norms.- 4.1.2 Extrinsic Norms.- 4.2 Dimensioned Singular Value Decomposition...



Read Multidimensional Analysis Online **Download PDF Multidimensional Analysis**

See Also



Games with Books : 28 of the Best Childrens Books and How to Use Them to Help Your Child Learn - From Preschool to Third Grade

Book Condition: Brand New. Book Condition: Brand New.

Read eBook »



Games with Books: Twenty-Eight of the Best Childrens Books and How to Use Them to Help Your Child Learn from Preschool to Third Grade

Book Condition: Brand New. Book Condition: Brand New.

Read eBook »



Growing Up: From Baby to Adult High Beginning Book with Online Access

Cambridge University Press, 2014. UNK. Book Condition: New. New Book. Shipped from US within 10 to 14 business days. Established seller since 2000.

Read eBook »



Some of My Best Friends Are Books : Guiding Gifted Readers from Preschool to High School

Book Condition: Brand New. Book Condition: Brand New.

Read eBook »



Bully, the Bullied, and the Not-So Innocent Bystander: From Preschool to High School and Beyond: Breaking the Cycle of Violence and Creating More Deeply Caring Communities

HarperCollins Publishers Inc, United States, 2016. Paperback. Book Condition: New. Reprint. 203 x 135 mm. Language: English. Brand New Book. An international bestseller, Barbara Coloroso s groundbreaking and trusted guide on bullying-including cyberbullying-arms parents...

Read eBook »



MY FIRST BOOK OF ENGLISH GRAMMAR 3 IN 1 NOUNS ADJECTIVES VERBS AGE 5+

EURO KIDS. Paper Back. Book Condition: New. Please note: We do not ship to PO Boxes, please provide us with your complete delivery address.

Read eBook »



Texting 1, 2, 3

SIMON SCHUSTER, United States, 2013. Paperback. Book Condition: New. 192 x 128 mm. Language: English . Brand New Book. Sam and Michael realize just how much their words matter when they tackle an important story

Read eBook »



Story Elements, Grades 3-4

Carson Dellosa Pub Co Inc, 2012. PAP. Book Condition: New. New Book. Shipped from US within 10 to 14 business days. Established seller since 2000.

Read eBook »



Minecraft Box Set 2 in 1: Minecraft Redstone. Minecraft Ultimate Redstone Step-By-Step Guide + All Secret Survival Tricks and Secrets: (Minecraft, Minecraft Secrets, Minecraft Stories, Minecraft Books

Createspace, United States, 2015. Paperback. Book Condition: New. 229 x 152 mm. Language: English . Brand New Book ***** Print on Demand *****. Minecraft BOX SET 2 IN 1: Minecraft Redstone. Minecraft Ultimate Redstone Step-by-Step Guide

Read eBook »



Read Write Inc. Phonics: Green Set 1 Storybook 3 Six Fish

Oxford University Press, United Kingdom, 2016. Paperback. Book Condition: New. Tim Archbold (illustrator). 197 x 78 mm. Language: N/A. Brand New Book. These engaging Storybooks provide structured practice for children learning to read the Read Read eBook »