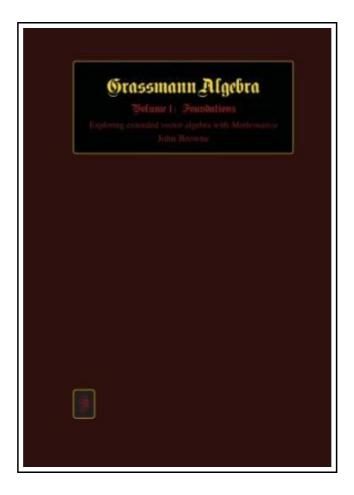
Grassmann Algebra Volume 1: Foundations: Exploring Extended Vector Algebra with Mathematica (Paperback)



Filesize: 2.58 MB

Reviews

A must buy book if you need to adding benefit. It is actually rally fascinating through studying time. Your way of life span will likely be transform as soon as you complete looking over this publication. (Ms. Bernice Rolfson)

GRASSMANN ALGEBRA VOLUME 1: FOUNDATIONS: EXPLORING EXTENDED VECTOR ALGEBRA WITH MATHEMATICA (PAPERBACK)



Createspace, United States, 2012. Paperback. Book Condition: New. 254 x 176 mm. Language: English . Brand New Book ***** Print on Demand *****.Grassmann Algebra Volume 1: Foundations Exploring extended vector algebra with Mathematica Grassmann algebra extends vector algebra by introducing the exterior product to algebraicize the notion of linear dependence. With it, vectors may be extended to higher-grade entities: bivectors, trivectors, . multivectors. The extensive exterior product also has a regressive dual: the regressive product. The pair behaves a little like the Boolean duals of union and intersection. By interpreting one of the elements of the vector space as an origin point, points can be defined, and the exterior product can extend points into higher-grade located entities from which lines, planes and multiplanes can be defined. Theorems of Projective Geometry are simply formulae involving these entities and the dual products. By introducing the (orthogonal) complement operation, the scalar product of vectors may be extended to the interior product of multivectors, which in this more general case may no longer result in a scalar. The notion of the magnitude of vectors is extended to the magnitude of multivectors: for example, the magnitude of the exterior product of two vectors (a bivector) is the area of the parallelogram formed by them. To develop these foundational concepts, we need only consider entities which are the sums of elements of the same grade. This is the focus of this volume. But the entities of Grassmann algebra need not be of the same grade, and the possible product types need not be constricted to just the exterior, regressive and interior products. For example quaternion algebra is simply the Grassmann algebra of scalars and bivectors under a new product operation. Clifford, geometric and higher order hypercomplex algebras, for example the octonions, may be defined similarly. If...

Read Grassmann Algebra Volume 1: Foundations: Exploring Extended Vector Algebra with Mathematica (Paperback) Online

Download PDF Grassmann Algebra Volume 1: Foundations: Exploring Extended Vector Algebra with Mathematica (Paperback)

You May Also Like



Children's Educational Book: Junior Leonardo Da Vinci: An Introduction to the Art, Science and Inventions of This Great Genius. Age 7 8 9 10 Year-Olds. [Us English] (Paperback)

Createspace, United States, 2013. Paperback. Book Condition: New. 254 x 178 mm. Language: English . Brand New Book ***** Print on Demand *****. ABOUT SMART READS for Kids . Love Art, Love Learning Welcome. Designed to...

Read Book »



Who am I in the Lives of Children? An Introduction to Early Childhood Education (Paperback)

Pearson Education (US), United States, 2015. Paperback. Book Condition: New. 10th Revised edition. 254 x 201 mm. Language: English. Brand New Book. Note: This is the bound book only and does not include access...

Read Book »



Children's Handwriting Book of Alphabets and Numbers: Over 4,000 Tracing Units for the Beginning Writer (Paperback)

Createspace, United States, 2015. Paperback. Book Condition: New. 254 x 203 mm. Language: English . Brand New Book ***** Print on Demand *****.The Children s Handwriting Book of Alphabets and Numbers provides extensive focus on...

Read Book »



Ella the Doggy Activity Book (Paperback)

Husky Publishing, United States, 2015. Paperback. Book Condition: New. 254 x 203 mm. Language: English . Brand New Book ***** Print on Demand *****.This activity book is comprised of crossword puzzles, word search games, word...

Read Book »



Adult Coloring Book Birds: Advanced Realistic Bird Coloring Book for Adults (Paperback)

Createspace Independent Publishing Platform, United States, 2015. Paperback. Book Condition: New. 254 x 203 mm. Language: English . Brand New Book ***** Print on Demand *****. Take your coloring to the next level with this Advanced...

Read Book »



Southern Educational Review Volume 3 (Paperback)

Rarebooksclub.com, United States, 2012. Paperback. Book Condition: New. 246 x 189 mm. Language: English . Brand New Book ***** Print on Demand *****. This historic book may have numerous typos and missing text. Purchasers can download

Download eBook »



Two Treatises: The Pearle of the Gospell, and the Pilgrims Profession to Which Is Added a Glasse for Gentlewomen to Dresse Themselues By. by Thomas Taylor Preacher of Gods Word to the Towne of Reding. (1624-1625) (Paperback)

Proquest, Eebo Editions, United States, 2010. Paperback. Book Condition: New. 246 x 189 mm. Language: English . Brand New Book ***** Print on Demand *****. EARLY HISTORY OF RELIGION. Imagine holding history in your hands. Now

Download eBook »



To Thine Own Self (Paperback)

Dog Ear Publishing, United States, 2011. Paperback. Book Condition: New. 229 x 152 mm. Language: English . Brand New Book ***** Print on Demand *****. Carefree and self assured Carolyn loves her life. Her uncle runs

Download eBook »



Two Treatises: The Pearle of the Gospell, and the Pilgrims Profession to Which Is Added a Glasse for Gentlewomen to Dresse Themselues By. by Thomas Taylor Preacher of Gods Word to the Towne of Reding. (1625) (Paperback)

Proquest, Eebo Editions, United States, 2010. Paperback. Book Condition: New. 246 x 189 mm. Language: English Brand New Book ***** Print on Demand *****. EARLY HISTORY OF RELIGION. Imagine holding history in your hands. Now you

Download eBook »



California Version of Who Am I in the Lives of Children? an Introduction to Early Childhood Education, Enhanced Pearson Etext with Loose-Leaf Version -- Access Card Package

Pearson, United States, 2015. Loose-leaf. Book Condition: New. 10th. 249 x 201 mm. Language: English . Brand New Book. NOTE: Used books, rentals, and purchases made outside of Pearson If purchasing or renting from companies

Download eBook »