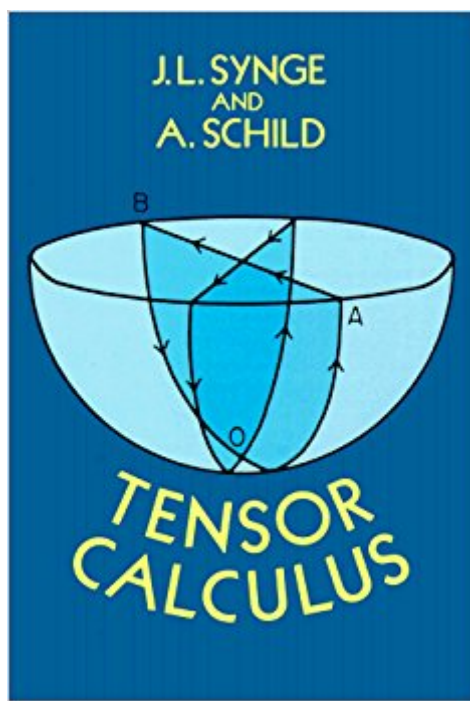**The book was found**

Tensor Calculus

Synopsis

"This book is an excellent classroom text, since it is clearly written, contains numerous problems and exercises, and at the end of each chapter has a summary of the significant results of the chapter." â " Quarterly of Applied Mathematics. Fundamental introduction for beginning student of absolute differential calculus and for those interested in applications of tensor calculus to mathematical physics and engineering. Topics include spaces and tensors; basic operations in Riemannian space, curvature of space, special types of space, relative tensors, ideas of volume, and more.

Book Information

Series: Dover Books on Mathematics (Book 5)

Paperback: 336 pages

Publisher: Dover Publications (July 1, 1978)

Language: English

ISBN-10: 0486636127

ISBN-13: 978-0486636122

Product Dimensions: 5.6 x 0.6 x 8.2 inches

Shipping Weight: 12.6 ounces (View shipping rates and policies)

Average Customer Review: 3.2 out of 5 starsÂ Â See all reviewsÂ (13 customer reviews)

Best Sellers Rank: #461,452 in Books (See Top 100 in Books)   #37 inÂ Books > Science & Math > Mathematics > Applied > Vector Analysis   #1009 inÂ Books > Science & Math > Mathematics > Pure Mathematics > Calculus   #116044 inÂ Books > Reference

Customer Reviews

"The introduction of numbers as coordinates...is an act of violence..." -- H. Weyl.If that's so, this is a very violent book. While it's true that physicists, particularly those working in General Relativity, were slow to abandon the coordinate approach, there can be little doubt that the sea of indicies form of Tensor Calculus runs counter to the modern approach to Differential Geometry, with its emphasis on abstract spaces, manifolds, bundles, exterior algebra, differential forms, diffeomorphisms, Lie groups, etc.Physicists trained prior to the trend towards employing modern mathematics will likely be right at home with this book, which presents the tensor calculus in the form developed by Levi-Civita and Ricci in the late 19th/early 20th Century. On the other hand, classically trained Physicists tend to be hopelessly confused when confronted by modern Differential Geometry, which relies on so much more of the modern machinery from areas such as Topology, Global Analysis,

and Group Theory/Representation Theory.Students would be better served to pursue the subject framed in a more modern context. That means learning about manifolds and analysis on manifolds. The best introduction is probably Spivak's "Calculus on Manifolds", followed by Munkres "Analysis on Manifolds". Darling's "Differential Forms and Connections" and Sternberg's "Lectures on Differential Geometry" are well regarded, as is do Carmo's "Differential Geometry of Curves and Surfaces". A working knowledge of multivariable calculus, linear algebra, and elementary analysis are required for making heads or tails out of these books, even though they are introductory in nature.

Tensor Calculus: A Concise Course (Dover Books on Mathematics) Tensor Calculus Introduction to Tensor Analysis and the Calculus of Moving Surfaces The Ark Of Mathematics Part 7: Tensor Calculus For Einstein and Engineers The Calculus Lifesaver: All the Tools You Need to Excel at Calculus (Princeton Lifesaver Study Guides) Student Solutions Manual for Stewart/Day's Calculus for Life Sciences and Biocalculus: Calculus, Probability, and Statistics for the Life Sciences Calculus for Biology and Medicine (Calculus for Life Sciences Series) The Absolute Differential Calculus (Calculus of Tensors) (Dover Books on Mathematics) Calculus - Study and Solutions Guide Volume II to accompany Calculus w/ Analytic Geometry Solutions Manual for: Calculus With Trigonometry and Analytic Geometry (Saxon Calculus) 1st (first) Edition by John Saxon, Frank Wang, John Young, Diana Harvey published by Saxon Publishers (1999) Bundle: Calculus: Early Transcendentals, Loose-Leaf Version, 8th + Enhanced WebAssign Printed Access Card for Calculus, Multi-Term Courses 5 Steps to a 5 AP Calculus BC 2017 (5 Steps to a 5 Ap Calculus Ab/Bc) Short Calculus: The Original Edition of "A First Course in Calculus" (Undergraduate Texts in Mathematics) Diffusion Weighted and Diffusion Tensor Imaging: A Clinical Guide Tensor Analysis on Manifolds (Dover Books on Mathematics) Schaum's Outlines Vector Analysis (And An Introduction to Tensor Analysis) Vector and Tensor Analysis with Applications (Dover Books on Mathematics) Vector and Tensor Analysis (Dover Books on Mathematics) Introduction to Vector and Tensor Analysis (Dover Books on Mathematics) Vector analysis: With an introduction to tensor analysis