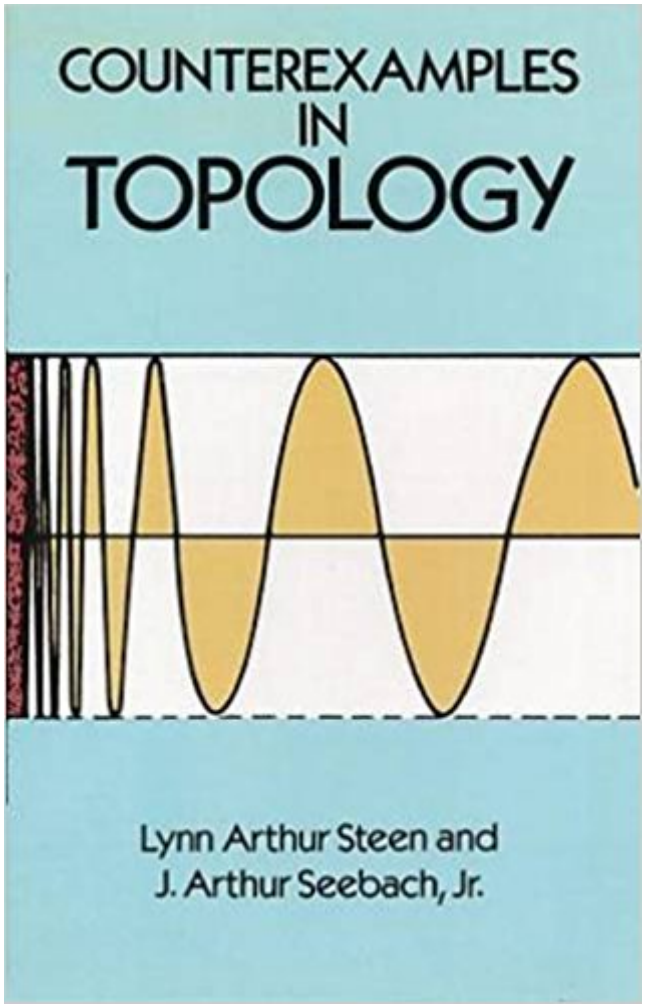
Counterexamples In Topology (Dover Books On Mathematics)



Synopsis

According to the authors of this highly useful compendium, focusing on examples is an extremely effective method of involving undergraduate mathematics students in actual research. It is only as a result of pursuing the details of each example that students experience a significant increment in topological understanding. With that in mind, Professors Steen and Seebach have assembled 143 examples in this book, providing innumerable concrete illustrations of definitions, theorems, and general methods of proof. Far from presenting all relevant examples, however, the book instead provides a fruitful context in which to ask new questions and seek new answers.Ranging from the familiar to the obscure, the examples are preceded by a succinct exposition of general topology and basic terminology and theory. Each example is treated as a whole, with a highly geometric exposition that helps readers comprehend the material. Over 25 Venn diagrams and reference charts summarize the properties of the examples and allow students to scan quickly for examples with prescribed properties. In addition, discussions of general methods of constructing and changing examples acquaint readers with the art of constructing counterexamples. The authors have included an extensive collection of problems and exercises, all correlated with various examples, and a bibliography of 140 sources, tracing each uncommon example to its origin.This revised and expanded second edition will be especially useful as a course supplement and reference work for students of general topology. Moreover, it gives the instructor the flexibility to design his own course while providing students with a wealth of historically and mathematically significant examples. 1978 edition.

Book Information

Series: Dover Books on Mathematics

Paperback: 272 pages

Publisher: Dover Publications (September 22, 1995)

Language: English

ISBN-10: 048668735X

ISBN-13: 978-0486687353

Product Dimensions: 0.5 x 5.5 x 8.5 inches

Shipping Weight: 9.1 ounces (View shipping rates and policies)

Average Customer Review: 4.3 out of 5 stars 21 customer reviews

Best Sellers Rank: #363,918 in Books (See Top 100 in Books) #63 inÃ Â Books > Science & Math > Mathematics > Geometry & Topology > Topology #4555 inÃ Â Books > Textbooks > Science &

Customer Reviews

I am confident that most people will agree when I say that topology is a study that teaches us how counter-intuitive many results in Mathematics can be. This is an excellent book to search for counterexamples when testing a conjecture that you can’t quite prove. Clearly written, and easy to follow.

I purchased this (on my own, not as a recommended or required text) for an introductory undergraduate topology class I took around a year ago. It was rather difficult to navigate at first, but as the semester progressed I found it increasingly useful as a side reference. It is perhaps even more useful now, as I like to go back to it, maybe go a little further and check my understanding periodically. Overall, I am satisfied with the purchase, and would recommend as a side text to anyone who wants to learn the material really well, and/or maintain it for a little bit while focusing more on other areas.

I really like the compactness of this book; that is, this book is the finite subcover for any arbitrary cover on the subject of Topology. Seriously, It gives almost all the major definitions which you would ever need, and it provides all kinds of nontrivial examples. Depending on your preference, the notation can sometimes be a little awkward, but it is neither incorrect nor ambiguous; that is, it is still correct and clear, depending on your understanding. Any mathematician ought to have this book in his collection for reference.

It’s very good.

Super textbook: well organized, clearly written, and, by its very nature, full of lesser mentioned topological spaces.

Nice book.

great book

It was not as helpful as I hoped it would be studying topology. It did have some useful moments as a

reference. Probably worth the expense I guess.

Counterexamples in Topology (Dover Books on Mathematics) Algebraic Topology (Dover Books on Mathematics) Principles of Topology (Dover Books on Mathematics) Introduction to Topology: Third Edition (Dover Books on Mathematics) General Topology (Dover Books on Mathematics) Topology and Geometry for Physicists (Dover Books on Mathematics) Introduction to Topology: Second Edition (Dover Books on Mathematics) Real Variables with Basic Metric Space Topology (Dover Books on Mathematics) A Combinatorial Introduction to Topology (Dover Books on Mathematics) A Concise Course in Algebraic Topology (Chicago Lectures in Mathematics) Differential Topology (Graduate Texts in Mathematics) Topology and Geometry (Graduate Texts in Mathematics) Essential Topology (Springer Undergraduate Mathematics Series) Algebraic Topology: An Introduction (Graduate Texts in Mathematics) (v. 56) Simplicial Objects in Algebraic Topology (Chicago Lectures in Mathematics) Basic Topology (Undergraduate Texts in Mathematics) READING ORDER: TAMI HOAG: BOOKS LIST OF THE BITTER SEASON, KOVAC/LISKA BOOKS, HENNESSY BOOKS, QUAID HORSES, DOUCET BOOKS, DEER LAKE BOOKS, ELENA ESTES BOOKS, OAK KNOLL BOOKS BY TAMI HOAG Mathematics and the Imagination (Dover Books on Mathematics) One Hundred Problems in Elementary Mathematics (Dover Books on Mathematics) Mathematics for Quantum Mechanics: An Introductory Survey of Operators, Eigenvalues, and Linear Vector Spaces (Dover Books on Mathematics)