



Categories for the Working Mathematician (Graduate Texts in Mathematics)

By Saunders Mac Lane

Download now

Read Online ➔

Categories for the Working Mathematician (Graduate Texts in Mathematics) By Saunders Mac Lane

An array of general ideas useful in a wide variety of fields. Starting from the foundations, this book illuminates the concepts of category, functor, natural transformation, and duality. It then turns to adjoint functors, which provide a description of universal constructions, an analysis of the representations of functors by sets of morphisms, and a means of manipulating direct and inverse limits. These categorical concepts are extensively illustrated in the remaining chapters, which include many applications of the basic existence theorem for adjoint functors. The categories of algebraic systems are constructed from certain adjoint-like data and characterised by Beck's theorem. After considering a variety of applications, the book continues with the construction and exploitation of Kan extensions. This second edition includes a number of revisions and additions, including new chapters on topics of active interest: symmetric monoidal categories and braided monoidal categories, and the coherence theorems for them, as well as 2-categories and the higher dimensional categories which have recently come into prominence.

 [Download Categories for the Working Mathematician \(Graduate ...pdf](#)

 [Read Online Categories for the Working Mathematician \(Gradua ...pdf](#)

Categories for the Working Mathematician (Graduate Texts in Mathematics)

By Saunders Mac Lane

Categories for the Working Mathematician (Graduate Texts in Mathematics) By Saunders Mac Lane

An array of general ideas useful in a wide variety of fields. Starting from the foundations, this book illuminates the concepts of category, functor, natural transformation, and duality. It then turns to adjoint functors, which provide a description of universal constructions, an analysis of the representations of functors by sets of morphisms, and a means of manipulating direct and inverse limits. These categorical concepts are extensively illustrated in the remaining chapters, which include many applications of the basic existence theorem for adjoint functors. The categories of algebraic systems are constructed from certain adjoint-like data and characterised by Beck's theorem. After considering a variety of applications, the book continues with the construction and exploitation of Kan extensions. This second edition includes a number of revisions and additions, including new chapters on topics of active interest: symmetric monoidal categories and braided monoidal categories, and the coherence theorems for them, as well as 2-categories and the higher dimensional categories which have recently come into prominence.

Categories for the Working Mathematician (Graduate Texts in Mathematics) By Saunders Mac Lane
Bibliography

- Sales Rank: #177031 in Books
- Brand: imusti
- Published on: 1998-09-25
- Original language: English
- Number of items: 1
- Dimensions: 9.21" h x .75" w x 6.14" l, 1.33 pounds
- Binding: Hardcover
- 317 pages

 [Download Categories for the Working Mathematician \(Graduate ...pdf](#)

 [Read Online Categories for the Working Mathematician \(Gradua ...pdf](#)

Download and Read Free Online Categories for the Working Mathematician (Graduate Texts in Mathematics) By Saunders Mac Lane

Editorial Review

Review

From the reviews of the second edition:

“The book under review is an introduction to the theory of categories which, as the title suggests, is addressed to the (no-nonsense) working mathematician, thus presenting the ideas and concepts of Category Theory in a broad context of mainstream examples (primarily from algebra). ... the book remains an authoritative source on the foundations of the theory and an accessible first introduction to categories. ... It is very well-written, with plenty of interesting discussions and stimulating exercises.” (Ittay Weiss, MAA Reviews, July, 2014)

Second Edition

S.M. Lane

Categories for the Working Mathematician

"A very useful introduction to category theory." INTERNATIONALE MATHEMATISCHE
NACHRICHTEN

Users Review

From reader reviews:

Marilyn Washington:

Do you have favorite book? When you have, what is your favorite's book? E-book is very important thing for us to understand everything in the world. Each guide has different aim as well as goal; it means that book has different type. Some people truly feel enjoy to spend their time and energy to read a book. They may be reading whatever they consider because their hobby is usually reading a book. Why not the person who don't like examining a book? Sometime, man feel need book whenever they found difficult problem or maybe exercise. Well, probably you will need this Categories for the Working Mathematician (Graduate Texts in Mathematics).

James Goodman:

Reading a publication can be one of a lot of exercise that everyone in the world adores. Do you like reading book so. There are a lot of reasons why people like it. First reading a publication will give you a lot of new facts. When you read a publication you will get new information mainly because book is one of various ways to share the information or their idea. Second, studying a book will make you actually more imaginative. When you examining a book especially fiction book the author will bring that you imagine the story how the character types do it anything. Third, you may share your knowledge to others. When you read this Categories for the Working Mathematician (Graduate Texts in Mathematics), you may tells your family,

friends and also soon about yours guide. Your knowledge can inspire different ones, make them reading a reserve.

Kenneth Salinas:

This Categories for the Working Mathematician (Graduate Texts in Mathematics) is fresh way for you who has fascination to look for some information given it relief your hunger associated with. Getting deeper you on it getting knowledge more you know or you who still having tiny amount of digest in reading this Categories for the Working Mathematician (Graduate Texts in Mathematics) can be the light food for you personally because the information inside this book is easy to get by simply anyone. These books build itself in the form that is reachable by anyone, yeah I mean in the e-book application form. People who think that in book form make them feel sleepy even dizzy this book is the answer. So there isn't any in reading a reserve especially this one. You can find actually looking for. It should be here for you actually. So , don't miss this! Just read this e-book sort for your better life along with knowledge.

Leslie Yazzie:

You can find this Categories for the Working Mathematician (Graduate Texts in Mathematics) by visit the bookstore or Mall. Simply viewing or reviewing it might to be your solve problem if you get difficulties on your knowledge. Kinds of this publication are various. Not only simply by written or printed but additionally can you enjoy this book through e-book. In the modern era similar to now, you just looking from your mobile phone and searching what your problem. Right now, choose your current ways to get more information about your e-book. It is most important to arrange yourself to make your knowledge are still update. Let's try to choose right ways for you.

Download and Read Online Categories for the Working Mathematician (Graduate Texts in Mathematics) By Saunders Mac Lane #5XA2VKGH4BD

Read Categories for the Working Mathematician (Graduate Texts in Mathematics) By Saunders Mac Lane for online ebook

Categories for the Working Mathematician (Graduate Texts in Mathematics) By Saunders Mac Lane 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 Categories for the Working Mathematician (Graduate Texts in Mathematics) By Saunders Mac Lane books to read online.

Online Categories for the Working Mathematician (Graduate Texts in Mathematics) By Saunders Mac Lane ebook PDF download

Categories for the Working Mathematician (Graduate Texts in Mathematics) By Saunders Mac Lane Doc

Categories for the Working Mathematician (Graduate Texts in Mathematics) By Saunders Mac Lane Mobipocket

Categories for the Working Mathematician (Graduate Texts in Mathematics) By Saunders Mac Lane EPub