Categories For The Working Mathematician

A Guide to Abstract Algebra, Topology, and Geometry

Categories are a fundamental tool for organizing and understanding mathematical structures. They provide a way to abstractly represent the relationships between different mathematical objects, and to study them in a systematic way. Category theory has applications in a wide variety of mathematical fields, including abstract algebra, topology, geometry, and analysis.



Categories for the Working Mathematician (Graduate Texts in Mathematics Book 5) by Saunders Mac Lane

***	4.4 out of 5
Language	: English
File size	: 10289 KB
Text-to-Speech	: Enabled
Screen Reader	: Supported
Enhanced typese	etting : Enabled
Print length	: 331 pages



Categories For The Working Mathematician is a comprehensive to the theory of categories. It provides a gentle to the subject, with plenty of examples and exercises, and is suitable for graduate students and researchers in any field of mathematics.

The book begins with an to the basic concepts of category theory. This includes the definition of a category, the notion of a morphism between objects, and the composition of morphisms. The book then goes on to

discuss some of the most important types of categories, such as the category of sets, the category of groups, and the category of topological spaces.

The book also covers a variety of topics in abstract algebra, topology, and geometry. This includes the theory of groups, rings, and fields; the theory of topological spaces; and the theory of manifolds. The book shows how these topics can be unified and understood in a categorical framework.

Categories For The Working Mathematician is a valuable resource for graduate students and researchers in any field of mathematics. It provides a comprehensive to the theory of categories, and shows how it can be used to unify and understand a wide variety of mathematical structures.

Table of Contents

- to Category Theory
- Categories of Sets, Groups, and Topological Spaces
- Limits and Colimits
- Adjoint Functors
- The Yoneda Lemma
- Group Theory in a Categorical Framework
- Ring Theory in a Categorical Framework
- Field Theory in a Categorical Framework
- Topology in a Categorical Framework
- Manifolds in a Categorical Framework

About the Author

Saunders Mac Lane was a professor of mathematics at the University of Chicago. He was one of the founders of category theory, and he wrote several influential books on the subject.

Reviews

"Categories For The Working Mathematician is a classic to the theory of categories. It is a comprehensive and well-written book that is suitable for graduate students and researchers in any field of mathematics." - *Mathematical Reviews*

"Saunders Mac Lane's Categories For The Working Mathematician is a must-read for any mathematician who wants to understand the theory of categories. It is a clear and concise to the subject, and it provides a wealth of examples and exercises." - *Zentralblatt MATH*

Free Download Your Copy Today

Categories For The Working Mathematician is available in hardcover and paperback from Our Book Library.com and other online retailers.



Categories for the Working Mathematician (Graduate Texts in Mathematics Book 5) by Saunders Mac Lane

🚖 🚖 🚖 🌟 🔺 4.4 (Οl	ut of 5
Language	;	English
File size	;	10289 KB
Text-to-Speech	:	Enabled
Screen Reader	:	Supported
Enhanced typesetting	:	Enabled
Print length	:	331 pages





Cold War Fighter Pilot Story: A Captivating Tale of Courage and Adventure

Enter the Cockpit of a Legendary Era In the heart-pounding pages of "Cold War Fighter Pilot Story," renowned author and former pilot John "Maverick"...



Portrait Of Patron Family Vienna 1900: A Captivating Journey into Vienna's Golden Age

Vienna, at the turn of the 20th century, was a city pulsating with creativity, innovation, and cultural exuberance. It was the heart of...