



A Transition to Advanced Mathematics: A Survey Course

By William Johnston, Alex McAllister

Download now

Read Online ➔

A Transition to Advanced Mathematics: A Survey Course By William Johnston, Alex McAllister

A Transition to Advanced Mathematics: A Survey Course promotes the goals of a "bridge" course in mathematics, helping to lead students from courses in the calculus sequence (and other courses where they solve problems that involve mathematical calculations) to theoretical upper-level mathematics courses (where they will have to prove theorems and grapple with mathematical abstractions). The text simultaneously promotes the goals of a "survey" course, describing the intriguing questions and insights fundamental to many diverse areas of mathematics, including Logic, Abstract Algebra, Number Theory, Real Analysis, Statistics, Graph Theory, and Complex Analysis.

The main objective is "to bring about a deep change in the mathematical character of students -- how they think and their fundamental perspectives on the world of mathematics." This text promotes three major mathematical traits in a meaningful, transformative way: to develop an ability to communicate with precise language, to use mathematically sound reasoning, and to ask probing questions about mathematics. In short, we hope that working through *A Transition to Advanced Mathematics* encourages students to become mathematicians in the fullest sense of the word.

A Transition to Advanced Mathematics has a number of distinctive features that enable this transformational experience. Embedded Questions and Reading Questions illustrate and explain fundamental concepts, allowing students to test their understanding of ideas independent of the exercise sets. The text has extensive, diverse Exercises Sets; with an average of 70 exercises at the end of section, as well as almost 3,000 distinct exercises. In addition, every chapter includes a section that explores an application of the theoretical ideas being studied. We have also interwoven embedded reflections on the history, culture, and philosophy of mathematics throughout the text.



[Download A Transition to Advanced Mathematics: A Survey Course.pdf](#)

 [Read Online A Transition to Advanced Mathematics: A Survey C ...pdf](#)

A Transition to Advanced Mathematics: A Survey Course

By William Johnston, Alex McAllister

A Transition to Advanced Mathematics: A Survey Course By William Johnston, Alex McAllister

A Transition to Advanced Mathematics: A Survey Course promotes the goals of a "bridge" course in mathematics, helping to lead students from courses in the calculus sequence (and other courses where they solve problems that involve mathematical calculations) to theoretical upper-level mathematics courses (where they will have to prove theorems and grapple with mathematical abstractions). The text simultaneously promotes the goals of a "survey" course, describing the intriguing questions and insights fundamental to many diverse areas of mathematics, including Logic, Abstract Algebra, Number Theory, Real Analysis, Statistics, Graph Theory, and Complex Analysis.

The main objective is "to bring about a deep change in the mathematical character of students -- how they think and their fundamental perspectives on the world of mathematics." This text promotes three major mathematical traits in a meaningful, transformative way: to develop an ability to communicate with precise language, to use mathematically sound reasoning, and to ask probing questions about mathematics. In short, we hope that working through *A Transition to Advanced Mathematics* encourages students to become mathematicians in the fullest sense of the word.

A Transition to Advanced Mathematics has a number of distinctive features that enable this transformational experience. Embedded Questions and Reading Questions illustrate and explain fundamental concepts, allowing students to test their understanding of ideas independent of the exercise sets. The text has extensive, diverse Exercises Sets; with an average of 70 exercises at the end of section, as well as almost 3,000 distinct exercises. In addition, every chapter includes a section that explores an application of the theoretical ideas being studied. We have also interwoven embedded reflections on the history, culture, and philosophy of mathematics throughout the text.

A Transition to Advanced Mathematics: A Survey Course By William Johnston, Alex McAllister Bibliography

- Sales Rank: #920608 in Books
- Published on: 2009-07-27
- Original language: English
- Number of items: 1
- Dimensions: 7.10" h x 1.50" w x 10.10" l, 3.20 pounds
- Binding: Hardcover
- 768 pages

 [Download A Transition to Advanced Mathematics: A Survey Cou ...pdf](#)

 [Read Online A Transition to Advanced Mathematics: A Survey C ...pdf](#)

Download and Read Free Online A Transition to Advanced Mathematics: A Survey Course By William Johnston, Alex McAllister

Editorial Review

Review

"A readable, comprehensive resource for transitioning to higher mathematical thinking. A valuable feature is the different types of questions and exercises. Professors will benefit from each chapter's optional application section, offering flexibility for teaching purposes."--*Choice*

About the Author

William Johnston is Professor of Mathematics at Butler University. He has been teaching mathematics to undergraduates since 1983.

Books by the Same Author:

An Introduction to Statistical Inference

Alex M. McAllister is an Associate Professor of Mathematics at Centre College. Over the past fifteen years, Alex has taught mathematics to undergraduates at the University of Notre Dame, Dartmouth College, and Centre College.

Users Review

From reader reviews:

Joseph Cosgrove:

The book A Transition to Advanced Mathematics: A Survey Course will bring you to the new experience of reading some sort of book. The author style to explain the idea is very unique. When you try to find new book to study, this book very appropriate to you. The book A Transition to Advanced Mathematics: A Survey Course is much recommended to you you just read. You can also get the e-book from your official web site, so you can more readily to read the book.

Sean Lee:

You are able to spend your free time to see this book this e-book. This A Transition to Advanced Mathematics: A Survey Course is simple bringing you can read it in the area, in the beach, train and soon. If you did not get much space to bring often the printed book, you can buy the actual e-book. It is make you simpler to read it. You can save typically the book in your smart phone. Consequently there are a lot of benefits that you will get when one buys this book.

Faye Michaels:

With this era which is the greater particular person or who has ability in doing something more are more important than other. Do you want to become considered one of it? It is just simple way to have that. What you need to do is just spending your time little but quite enough to get a look at some books. Among the books in the top list in your reading list will be A Transition to Advanced Mathematics: A Survey Course. This book that is qualified as The Hungry Hillside can get you closer in growing to be precious person. By looking way up and review this publication you can get many advantages.

Carol Wells:

As we know that book is important thing to add our information for everything. By a publication we can know everything we really wish for. A book is a group of written, printed, illustrated or even blank sheet. Every year was exactly added. This reserve A Transition to Advanced Mathematics: A Survey Course was filled regarding science. Spend your free time to add your knowledge about your scientific research competence. Some people has different feel when they reading a new book. If you know how big good thing about a book, you can sense enjoy to read a reserve. In the modern era like right now, many ways to get book which you wanted.

Download and Read Online A Transition to Advanced Mathematics: A Survey Course By William Johnston, Alex McAllister #BH5L0PMW1VT

Read A Transition to Advanced Mathematics: A Survey Course By William Johnston, Alex McAllister for online ebook

A Transition to Advanced Mathematics: A Survey Course By William Johnston, Alex McAllister 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 A Transition to Advanced Mathematics: A Survey Course By William Johnston, Alex McAllister books to read online.

Online A Transition to Advanced Mathematics: A Survey Course By William Johnston, Alex McAllister ebook PDF download

A Transition to Advanced Mathematics: A Survey Course By William Johnston, Alex McAllister Doc

A Transition to Advanced Mathematics: A Survey Course By William Johnston, Alex McAllister Mobipocket

A Transition to Advanced Mathematics: A Survey Course By William Johnston, Alex McAllister EPub

BH5L0PMW1VT: A Transition to Advanced Mathematics: A Survey Course By William Johnston, Alex McAllister