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Autore	Exner George R.
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Soggetti	Mathematical analysis Topology Logic, Symbolic and mathematical Analysis Mathematical Logic and Foundations
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Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	1 Examples -- 1.1 Propaganda -- 1.2 Basic Examples for Definitions -- 1.3 Basic Examples for Theorems -- 1.4 Extended Examples -- 1.5 Notational Interlude -- 1.6 Examples Again: Standard Sources -- 1.7 Non-examples for Definitions -- 1.8 Non-examples for Theorems -- 1.9 Summary and More Propaganda -- 1.10 What Next? -- 2 Informal Language and Proof -- 2.1 Ordinary Language Clues -- 2.2 Real-Life Proofs vs. Rules of Thumb -- 2.3 Proof Forms for Implication -- 2.4 Two More Proof Forms -- 2.5 The Other Shoe, and Propaganda -- 3 Formal Language and Proof -- 3.1 Propaganda -- 3.2 Formal Language: Basics -- 3.3 Quantifiers -- 3.4 Finding Proofs from Structure -- 3.5 Summary, Propaganda, and What Next? -- 4 Laboratories -- 4.1 Lab I: Sets by Example -- 4.2 Lab II: Functions by Example -- 4.3 Lab III: Sets and Proof -- 4.4 Lab IV: Functions and Proof -- 4.5 Lab V: Function of Sets -- 4.6 Lab VI: Families of Sets -- A Theoretical Apologia -- B Hints -- References.
Sommario/riassunto	For Students Congratulations! You are about to take a course in mathematical proof. If you are nervous about the whole thing, this book is for you (if not, please read the second and third paragraphs in the introduction for professors following this, so you won't feel left out). The rumors are true; a first course in proof may be very hard

because you will have to do three things that are probably new to you:
1. Read mathematics independently. 2. Understand proofs on your own.
:1. Discover and write your own proofs. This book is all about what to
do if this list is threatening because you "never read your calculus
book" or "can't do proofs. " Here's the good news: you must be good at
mathematics or you wouldn't have gotten this far. Here's the bad news:
what worked before may not work this time. Success may lie in
improving or discarding many habits that were good enough once but
aren't now. Let's see how we've gotten to a point at which someone
could dare to imply that you have bad habits. | The typical elementary
and high school mathematics education in the United States tends to
teach students to have ineffective learning habits, 1 In the first
paragraph, yet. xiv Introduction and we blush to admit college can be
just as bad.
