Elementary Analysis: The Theory of Calculus

To Download this book in many format Visit :

https://wocoentala.org/source1/2dbfd28fb9d068cb94c0ea590b89097f

Designed for students having no previous experience with rigorous proofs, this text can be used immediately after standard calculus courses. It is highly recommended for anyone planning to study advanced analysis, as well as for future secondary school teachers. A limited number of concepts involving the real line and functions on the real line are studied, while many abstract ideas, such as metric spaces and ordered systems, are avoided completely. A thorough treatment of sequences of numbers is used as a basis for studying standard calculus topics, and optional sections invite students to study such topics as metric spaces and Riemann-Stieltjes integrals.

From the reviews: K.A. Ross Elementary Analysis The Theory of Calculus "This book is intended for the student who has a good, but naï ve, understanding of elementary calculus and now wishes to gain a thorough understanding of a few basic concepts in analysis, such as continuity, convergence of sequences and series of numbers, and convergence of sequences and series of functions. There are many nontrivial examples and exercises, which illuminate and extend the material. The author has tried to write in an informal but precise style, stressing motivation and methods of proof, and, in this reviewer's opinion, has succeeded admirably."-MATHEMATICAL REVIEWS "This book occupies a niche between a calculus course and a full-blown real analysis course. ... I think the book should be viewed as a text for a bridge or transition course that happens to be about analysis ... . Lots of counterexamples. Most calculus books get the proof of the chain rule wrong, and Ross not only gives a correct proof but gives an example where the common mis-proof fails." (Allen Stenger, The Mathematical Association of America, June, 2008)

Other Books

A First Course in Real Analysis, Many changes have been made in this second edition of A First Course in Real Analysis. The most noticeable is the addition of many problems and the inclusion of answers to most of the odd-numbered exercises. The book's readability has also been improved by the further clarification of many of the proofs, additional explanatory remarks, and clearer notation.

⬜ ⬜ ⬜ ⬜ ⬜ . Undergraduate Texts in Mathematics (continued from page ii) Halmos: Naive Set Theory. ... Readings in Mathematics . ... Third edition . Lang: Undergraduate Algebra. Second edition. Lang: Undergraduate Analysis . Lax/Burstein/Lax: Calculus ..."