

ZMATH 2010b.00340

Roberts, Charles E. jun.

Introduction to mathematical proofs. A transition.

Textbooks in Mathematics. Boca Raton, FL: CRC Press (ISBN 978-1-4200-6955-6/hbk). viii, 425 p. (2010).

From the preface: “This text is written for undergraduate mathematics majors and minors who have taken only computationally oriented, problem solving mathematics courses previously. Usually these students are freshmen and sophomores. The primary objectives of the text are to teach the reader: (1) to reason logically, (2) to read the proofs of others critically, and (3) to write valid mathematical proofs.” An unusual feature of the text is the inclusion of detailed historical notes on nearly every topic. The nine chapters are titled: Logic, Deductive Mathematical Systems and Proofs, Set Theory, Relations, Functions, Mathematical Induction, Cardinalities of Sets, Proofs from Real Analysis, Proofs from Group Theory. There is also a short appendix on reading and writing mathematical proofs. *Steven C. Althoen (Holly)*

Classification: E55

Keywords: theorem proving

<http://www.crcnetbase.com/isbn/978-1-4200-6955-6>