

ENCYCLOPEDIA OF MATHEMATICS AND ITS APPLICATIONS

# ITERATIVE FUNCTIONAL EQUATIONS

MAREK KUCZMA, BOGDAN CHOCZEWSKI  
and ROMAN GER



# Iterative Functional Equations

**Mariusz Bajger**



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Talwong, Mahāwitthayalai Kasētsāt. Department of Mathematics, 2004 **Iteration Theory and Its Functional Equations**

Roman Liedl, Ludwig Reich, György Targonski, 2014-01-15 *Iteration Theory and Its Functional Equations* Roman

Liedl, Ludwig Reich, György I. Targonski, 1985 *Developments in Functional Equations and Related Topics* Janusz

Brzdęk, Krzysztof Ciepliński, Themistocles M. Rassias, 2017-08-14 This book presents current research on Ulam stability for functional equations and inequalities Contributions from renowned scientists emphasize fundamental and new results methods and techniques Detailed examples are given to theories to further understanding at the graduate level for students in mathematics physics and engineering Key topics covered in this book include Quasi means Approximate isometries Functional equations in hypergroups Stability of functional equations Fischer Muszly equation Haar meager sets and Haar

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Type Mariusz Bajger, 1996 Functional Equations in a Single Variable Marek Kuczma, 1968 **A Two Parameter Family of Operators and Iterative Functional Equations** H.-H. Kairies, 2000 **Functional Equations and Modelling in Science and Engineering** Enrique Castillo, 1992-05-27 Provides engineers and applied scientists with some selected results of functional equations and their applications with the intention of changing the way they think about mathematical modelling Many of the proofs are simplified or omitted so as not to bore or confuse engineers Functional equations

Introduction to Functional Equations Costas Efthimiou, 2011-10-13 Functions and their properties have been part of the rigorous precollege curriculum for decades And functional equations have been a favorite topic of the leading national and international mathematical competitions Yet the subject has not received equal attention by authors at an introductory level The majority of the books on the topic remain unreachable to the curious and intelligent precollege student The present book is an attempt to eliminate this disparity The book opens with a review chapter on functions which collects the relevant foundational information on functions plus some material potentially new to the reader The next chapter presents a working definition of functional equations and explains the difficulties in trying to systematize the theory With each new chapter the author presents methods for the solution of a particular group of equations Each chapter is complemented with many solved examples the majority of which are taken from mathematical competitions and professional journals The book ends with a chapter of unsolved problems and some other auxiliary material The book is an invaluable resource for precollege and college students who want to deepen their knowledge of functions and their properties for teachers and instructors who wish to enrich their curricula and for any lover of mathematical problem solving techniques In the interest of fostering a greater awareness and appreciation of mathematics and its connections to other disciplines and everyday life MSRI and the AMS are publishing books in the Mathematical Circles Library series as a service to young people their parents and teachers and the mathematics profession

**A Recurrent Method of Solving Iterative Functional Equations** Witold Jarczyk, 1991

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