Fibonacci And Lucas Numbers With Applications, Volume One (Pure And Applied Mathematics: A Wiley Series Of Texts, Monographs And Tracts)
Praise for the First Edition “...beautiful and well worth the reading | with many exercises and a good bibliography, this book will fascinate both students and teachers.” Mathematics Teacher

Fibonacci and Lucas Numbers with Applications, Volume I, Second Edition provides a user-friendly and historical approach to the many fascinating properties of Fibonacci and Lucas numbers, which have intrigued amateurs and professionals for centuries. Offering an in-depth study of the topic, this book includes exciting applications that provide many opportunities to explore and experiment. In addition, the book includes a historical survey of the development of Fibonacci and Lucas numbers, with biographical sketches of important figures in the field. Each chapter features a wealth of examples, as well as numeric and theoretical exercises that avoid using extensive and time-consuming proofs of theorems. The Second Edition offers new opportunities to illustrate and expand on various problem-solving skills and techniques. In addition, the book features: A clear, comprehensive introduction to one of the most fascinating topics in mathematics, including links to graph theory, matrices, geometry, the stock market, and the Golden Ratio Abundant examples, exercises, and properties throughout, with a wide range of difficulty and sophistication Numeric puzzles based on Fibonacci numbers, as well as popular geometric paradoxes, and a glossary of symbols and fundamental properties from the theory of numbers A wide range of applications in many disciplines, including architecture, biology, chemistry, electrical engineering, physics, physiology, and neurophysiology

The Second Edition is appropriate for upper-undergraduate and graduate-level courses on the history of mathematics, combinatorics, and number theory. The book is also a valuable resource for undergraduate research courses, independent study projects, and senior/graduate theses, as well as a useful resource for computer scientists, physicists, biologists, and electrical engineers. Thomas Koshy, PhD, is Professor Emeritus of Mathematics at Framingham State University in Massachusetts and author of several books and numerous articles on mathematics. His work has been recognized by the Association of American Publishers, and he has received many awards, including the Distinguished Faculty of the Year. Dr. Koshy received his PhD in Algebraic Coding Theory from Boston University. Anyone who loves mathematical puzzles, number theory, and Fibonacci numbers will treasure this book. Dr. Koshy has compiled Fibonacci lore from diverse sources into one understandable and intriguing volume, [interweaving] a historical flavor into an array of applications.

Marjorie Bicknell-Johnson

**Book Information**

Series: Pure and Applied Mathematics: A Wiley Series of Texts, Monographs and Tracts (Book 1)