

Number Theory in Science and Communication



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出版者:Springer-Verlag Berlin Heidelberg

出版时间:2009

装帧:Hardcover

isbn:9783540852971

"Number Theory in Science and Communication" is a well-known introduction for non-mathematicians to this fascinating and useful branch of applied mathematics . It stresses intuitive understanding rather than abstract theory and highlights important concepts such as continued fractions, the golden ratio, quadratic residues and Chinese remainders, trapdoor functions, pseudoprimes and primitive elements. Their applications to problems in the real world are one of the main themes of the book. This revised fifth edition is augmented by recent advances in coding theory, permutations and derangements and a chapter in quantum cryptography.

From reviews of earlier editions –

"I continue to find [Schroeder's] Number Theory a goldmine of valuable information. It is a marvellous book, in touch with the most recent applications of number theory and written with great clarity and humor." Philip Morrison (Scientific American)

"A light-hearted and readable volume with a wide range of applications to which the author has been a productive contributor – useful mathematics outside the formalities of theorem and proof." Martin Gardner

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