Bell, Eric Temple
The last problem. Rev. and updated and with an introduction and notes by Underwood Dudley. (English) Zbl 0706.11001
MAA Spectrum. Washington: Mathematical Association of America. 326 p. (1990).

This colourful, idiosyncratic and entertaining book is an amble through the cultures and personalities that bred the number theory culminating in Fermat's last problem, the conjecture that $x^n + y^n = z^n$ has no nontrivial integer solutions when n exceeds 2. The first seven chapters cover the life, times and mathematics of the Babylonians, Egyptians, Pythagoreans, and Alexandrians, while the next seven deal with the period of Fermat. C.-G. Bachet (1581-1638), whose edition of Diophantus was read by Fermat, and Mersenne (1588-1648) are accorded separate chapters; another chapter deals with other contemporaries; there is a biography of P. Fermat (1601-1665) along with excerpts from his correspondence. Very little is said about the "last problem" itself, and many other number theory problems are mentioned. Originally published in 1961 (see the review in Zbl 0633.00001; a reprint was published in 1987), the book is augmented by a four-page note by D. H. Lehmer sketching more recent developments to 1961 and notes by U. Dudley outlining progress on problems discussed by Bell up to 1988. This book is highly recommended, particularly to students and teachers.

Reviewer: E.J.Barbeau

MSC:

11-03	History of number theory
11-01	Introductory exposition (textbooks, tutorial papers, etc.) pertaining to number theory
11D41	Higher degree equations; Fermat's equation
01A05	General histories, source books
01A45	History of mathematics in the 17th century
01A75	Collected or selected works; reprintings or translations of classics

Cited in **1** Review
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Keywords:

Fermat equation; diophantine equations; Fermat's last theorem; Babylonians; Egyptians; Pythagoreans; Alexandrians; Bachet; Mersenne