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Sommario/riassunto	An exciting approach to the history and mathematics of number theory ". . . the author's style is totally lucid and very easy to read . . .the result is indeed a wonderful story." – Mathematical Reviews Written in a unique and accessible style for readers of varied mathematical backgrounds, the Second Edition of Primes of the Form $p = x^2 + ny^2$ details the history behind how Pierre de Fermat's work ultimately gave birth to quadratic reciprocity and the genus theory of quadratic forms. The book also illustrates how results of Euler and Gauss can be fully understood only in the context of class field theory, and in addition, explores a selection of the magnificent formulas of complex multiplication. Primes of the Form $p = x^2 + ny^2$, Second Edition focuses on addressing the question of when a prime p is of the form $x^2 + ny^2$, which serves as the basis for further discussion of various mathematical topics. This updated edition has several new notable features, including: A well-motivated introduction to the classical formulation of class field theory Illustrations of explicit numerical

examples to demonstrate the power of basic theorems in various situations An elementary treatment of quadratic forms and genus theory Simultaneous treatment of elementary and advanced aspects of number theory New coverage of the Shimura reciprocity law and a selection of recent work in an updated bibliography Primes of the Form $p = x^2 + ny^2$, Second Edition is both a useful reference for number theory theorists and an excellent text for undergraduate and graduate-level courses in number and Galois theory.