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Sommario/riassunto	This undergraduate textbook provides an elegant introduction to the arithmetic of quadratic number fields, including many topics not usually covered in books at this level. Quadratic fields offer an introduction to algebraic number theory and some of its central objects: rings of integers, the unit group, ideals and the ideal class group. This textbook provides solid grounding for further study by placing the subject within the greater context of modern algebraic number theory. Going beyond what is usually covered at this level, the book introduces the notion of modularity in the context of quadratic reciprocity, explores the close links between number theory and geometry via Pell conics, and presents applications to Diophantine equations such as the Fermat and Catalan equations as well as elliptic curves. Throughout, the book contains extensive historical comments, numerous exercises (with solutions), and pointers to further study. Assuming a moderate background in elementarynumber theory and abstract algebra, Quadratic Number Fields offers an engaging first

course in algebraic number theory, suitable for upper undergraduate students.