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Sommario/riassunto	This book offers a comprehensive introduction to the study of solutions of linear and nonlinear partial differential equations, covering elliptic, parabolic and hyperbolic types. It places particular emphasis on the concept of weak solution, a fundamental framework for addressing well-posed problems in PDE theory. The book examines the existence and uniqueness of solutions for various types of PDEs, along with their key properties. Additionally, many of the methods introduced are also applicable for analyzing the convergence of numerical schemes used to approximate these equations. Based on courses taught by the authors, this book is primarily aimed at graduate students and contains numerous exercises and problems with detailed solutions.