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Sommario/riassunto	This book is a collection of invited and reviewed chapters on state-of-the-art developments in interdisciplinary mathematics. The book discusses recent developments in the fields of theoretical and applied mathematics, covering areas of interest to mathematicians, scientists, engineers, industrialists, researchers, faculty, and students. Readers will be exposed to topics chosen from a wide range of areas including differential equations, integral reforms, operational calculus, numerical analysis, fluid mechanics, and computer science. The aim of the book is to provide brief and reliably expressed research topics that will enable those new or not aware of mathematical sciences in this part of the world. While the book has not been precisely planned to address any branch of mathematics, it presents contributions of the relevant topics to do so. The topics chosen for the book are those that we have found of significant interest to many researchers in the world. These also are topicsthat are applicable in many fields of computational and applied mathematics. This book constitutes the first attempt in Jordanian literature to scientifically consider the extensive need of research development at the national and international levels with which mathematics deals. The book grew not only from the international collaboration between the authors but rather from the long need for a research-based book from different parts of the world for researchers and professionals working in computational and applied mathematics.