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Nota di contenuto	Chapter 1 Nonlinear Programming -- Chapter 2 Perron-Frobenius Theorem -- Chapter 3 Dominant Diagonal Matrix and Quadratic Form -- Chapter 4 Recent Issue on Eigenvalue Problem -- Appendix Lists of Mathematical Theorems and Definitions.
Sommario/riassunto	This book focuses on the Frobenius theorem regarding a nonlinear simultaneous system. The Frobenius theorem is well known as a condition for a linear simultaneous system’s having a nonnegative solution. Generally, however, the condition of a simultaneous system, including a non-linear system’s having a nonnegative solution, is hardly discussed at all. This book, therefore, extends the conventional Frobenius theorem for nonlinear simultaneous systems for economic analysis. Almost all static optimization problems in economics involve nonlinear programing. Theoretical models in economics are described in the form of a simultaneous system resulting from the rational

optimization behavior of households and enterprises. On the other hand, rational optimization behavior of households and enterprises is, mathematically speaking, expressed as nonlinear programing. For this reason, it is important to understand the meaning of nonlinear programing. Because this book includes explanations of the relations among various restrictions in a nonlinear programing systematically and clearly, this book is suitable for students in graduate school programs in economics.