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Titolo Linear and convex optimization : a mathematical approach / / Michael

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Sommario/riassunto

"This book introduces and explains the mathematics behind convex and linear optimization, focusing on developing insights in problem complexity, modelling and algorithms. Although many introductory books pay little attention to nonlinear optimization, convex problems deserve attention because of their many applications and the fast algorithms that have been developed to solve them. The main algorithms used in linear, integer, and convex optimization are presented in a mathematical style. The emphasis is on what makes a class of problems practically solvable and developing insight into algorithms geometrically. Principles of algorithm design are explained, making it accessible to those with no background in algorithms. The important issue of speed of algorithms is discussed and addressed theoretically where appropriate. A breadth of recent applications are presented to demonstrate the many areas in which optimization is successfully used. The process of formulating optimization problems is included throughout, both to develop the ability to formulate large problems and to appreciate that some formulations are more tractable"

