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Nota di contenuto	First Things First on Convex Sets -- Affine Diameters and the Critical Set -- Measures of Stability and Symmetry -- Mean Minkowski Measures.
Sommario/riassunto	This textbook treats two important and related matters in convex geometry: the quantification of symmetry of a convex set—measures of symmetry—and the degree to which convex sets that nearly minimize such measures of symmetry are themselves nearly symmetric—the phenomenon of stability. By gathering the subject's core ideas and highlights around Grünbaum's general notion of measure of symmetry, it paints a coherent picture of the subject, and guides the reader from the basics to the state-of-the-art. The exposition takes various paths to results in order to develop the reader's grasp of the unity of ideas, while interspersed remarks enrich the material with a behind-the-scenes view of corollaries and logical connections, alternative proofs, and allied results from the literature. Numerous illustrations elucidate definitions and key constructions, and over 70 exercises—with hints and references for the more difficult ones—test and sharpen the reader's comprehension. The presentation includes: a basic course covering foundational notions in convex geometry, the three pillars of the combinatorial theory (the theorems of Carathéodory, Radon, and Helly), critical sets and Minkowski measure, the Minkowski–Radon

inequality, and, to illustrate the general theory, a study of convex bodies of constant width; two proofs of F. John's ellipsoid theorem; a treatment of the stability of Minkowski measure, the Banach–Mazur metric, and Groemer's stability estimate for the Brunn–Minkowski inequality; important specializations of Grünbaum's abstract measure of symmetry, such as Winternitz measure, the Rogers–Shepard volume ratio, and Guo's L_p -Minkowski measure; a construction by the author of a new sequence of measures of symmetry, the k th mean Minkowski measure; and lastly, an intriguing application to the moduli space of certain distinguished maps from a Riemannian homogeneous space to spheres—illustrating the broad mathematical relevance of the book's subject.
