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Titolo	When less is more : visualizing basic inequalities // Claudi Alsina, Roger B. Nelsen [[electronic resource]]
Pubbl/distr/stampa	Washington : , : Mathematical Association of America, , 2009
ISBN	1-61444-202-9
Descrizione fisica	1 online resource (xix, 181 pages) : digital, PDF file(s)
Collana	Dolciani Mathematical Expositions, ; v. 36 Dolciani mathematical expositions ; ; no. 36
Disciplina	515.26
Soggetti	Inequalities (Mathematics) Visualization Geometrical drawing
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Title from publisher's bibliographic system (viewed on 02 Oct 2015).
Nota di bibliografia	Includes bibliographical references (p. 171-177) and index.
Nota di contenuto	Representing positive numbers as lengths of segments -- Representing positive numbers as areas or volumes -- Inequalities and the existence of triangles -- Using incircles and circumcircles -- Using reflections -- Using rotations -- Employing non-isometric transformations -- Employing graphs of functions -- Additional topics.
Sommario/riassunto	Inequalities permeate mathematics, from the Elements of Euclid to operations research and financial mathematics. Yet too often, especially in secondary and collegiate mathematics, the emphasis is on things equal to one another rather than unequal. While equalities and identities are without doubt important, they don't possess the richness and variety that one finds with inequalities. The objective of this book is to illustrate how the use of visualization can be a powerful tool for better understanding some basic mathematical inequalities. Drawing pictures is a well-known method for problem solving, and the authors will convince you that the same is true when working with inequalities. They show how to produce figures in a systematic way for the illustration of inequalities and open new avenues to creative ways of thinking and teaching. In addition, a geometric argument cannot only show two things unequal, but also help the observer see just how unequal they are. The concentration on geometric inequalities is

partially motivated by the hope that secondary and collegiate teachers might use these pictures with their students. Teachers may wish to use one of the drawings when an inequality arises in the course. Alternatively, *When Less Is More* might serve as a guide for devoting some time to inequalities and problem solving techniques, or even as part of a course on inequalities.
