

1. Record Nr.	UNINA9910790363603321
Autore	Alsina Claudi
Titolo	Icons of mathematics : an exploration of twenty key images / / Claudi Alsina, Roger B. Nelsen [[electronic resource]]
Pubbl/distr/stampa	Washington : , : Mathematical Association of America, , 2011
ISBN	0-88385-986-6
Descrizione fisica	1 online resource (xvii, 327 pages) : digital, PDF file(s)
Collana	Dolciani Mathematical Expositions, ; v. 45 Dolciani mathematical expositions ; ; no. 45
Disciplina	516.2/04
Soggetti	Geometry - Famous problems Geometrical constructions Generation of geometric forms Proof theory Mathematical notation Geometrical drawing Geometry, Plane Visualization
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. 309-319) and index.
Nota di contenuto	; Preface -- Twenty key icons of mathematics -- The bride's chair -- Zhou Bi Suan Jing -- Garfield's trapezoid -- The semicircle -- Similar figures -- Cevians -- The right triangle -- Napoleon's triangles -- Arcs and angles -- Polygons with circles -- Two circles -- Venn diagrams -- Overlapping figures -- Yin and yang -- Polygonal lines -- Star polygons -- Self-similar figures -- Tatami -- The rectangular hyperbola -- Tiling -- Solutions to the challenges -- ; References -- ; Index -- ; About the authors.
Sommario/riassunto	Icons of mathematics are certain geometric diagrams that play a crucial role in visualizing mathematical proofs, and in the book the authors present 20 of them and explore the mathematics that lies within and that can be created. The authors devote a chapter to each icon, illustrating its presence in real life, its primary mathematical characteristics and how it plays a central role in visual proofs of a wide

range of mathematical facts. Among these are classical results from plane geometry, properties of the integers, means and inequalities, trigonometric identities, theorems from calculus, and puzzles from recreational mathematics.
