1. Record Nr. UNINA9910461929403321

Autore	Alsina Claudi
Titolo	Icons of mathematics [[electronic resource]] : an exploration of twenty key images / / Claudi Alsina, Roger B. Nelsen
Pubbl/distr/stampa	[Washington, D.C.], : Mathematical Association of America, c2011
ISBN	0-88385-986-6
Descrizione fisica	1 online resource (347 p.)
Collana	Dolciani mathematical expositions ; ; no. 45
Altri autori (Persone)	NelsenRoger B
Disciplina	516.2/04
Soggetti	Geometry - Famous problems Geometrical constructions Generation of geometric forms Proof theory Mathematical notation Geometrical drawing Geometry, Plane Visualization Electronic books.
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Description based upon print version of record.
Nota di bibliografia	Includes bibliographical references (p. 309-319) and index.
Nota di contenuto	; 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.
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.