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Nota di contenuto	A garden of integers -- Distinguished numbers -- Points in the plane -- The polygonal playground -- A treasury of triangle theorems -- The enchantment of the equilateral triangle -- The quadrilaterals' corner -- Squares everywhere -- Curves ahead -- Adventures in tiling and coloring -- Geometry in three dimensions -- Additional theorems, problems, and proofs.
Sommario/riassunto	Theorems and their proofs lie at the heart of mathematics. In speaking of the purely aesthetic qualities of theorems and proofs, G. H. Hardy wrote that in beautiful proofs 'there is a very high degree of unexpectedness, combined with inevitability and economy.' Charming Proofs present a collection of remarkable proofs in elementary mathematics that are exceptionally elegant, full of ingenuity, and succinct. By means of a surprising argument or a powerful visual representation, the proofs in this collection will invite readers to enjoy the beauty of mathematics, to share their discoveries with others, and to become involved in the process of creating new proofs. Charming Proofs is organized as follows. Following a short introduction about proofs and the process of creating proofs, the authors present, in twelve chapters, a wide and varied selection of proofs they consider charming, Topics include the integers, selected real numbers, points in the plane, triangles, squares, and other polygons, curves, inequalities, plane tilings, origami, colorful proofs, three-dimensional geometry, etc. At the end of each chapter are some challenges that will draw the

reader into the process of creating charming proofs. There are over 130 such challenges. Charming Proofs concludes with solutions to all of the challenges, references, and a complete index. As in the authors previous books with the MAA (Math Made Visual and When Less Is More), secondary school and college and university teachers may wish to use some of the charming proofs in their classrooms to introduce their students to mathematical elegance. Some may wish to use the book as a supplement in an introductory course on proofs, mathematical reasoning, or problem solving.