

1. Record Nr.	UNINA9910808578003321
Autore	Crato Nuno
Titolo	Figuring it out : entertaining encounters with everyday math / / Nuno Crato
Pubbl/distr/stampa	Berlin ; ; New York, : Springer, 2010
ISBN	1-282-98275-3 9786612982750 3-642-04833-1
Edizione	[1st ed. 2010.]
Descrizione fisica	1 online resource (212 p.)
Disciplina	510.02
Soggetti	Mathematics
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Original Portuguese edition: A matematica das coisas ; Lisboa, Portugal : Gradiva Publicacoes Ida., 2008.
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Everyday Matters -- The Dinner Table Algorithm -- Cutting the Christmas Cake -- Oranges and Computers -- When Two and Two Don't Make Four -- Getting More Intelligent Every Day -- The Other Lane Always Goes Faster -- Shoelaces and Neckties -- Number Puzzles -- Tossing a Coin -- The Switch -- Eubulides, The Heap and The Euro -- The Earth is Round -- How GPS Works -- Gear Wheels -- February 29 -- The Nonius Scale -- Pedro Nunes' Map -- Lighthouse Geometry -- Asteroids and Least Squares -- The Useful Man and the Genius -- Secret Affairs -- Alice and Bob1 -- Inviolate Cybersecrets -- Quantum Cryptography -- The FBI Wavelet -- The Enigma Machine -- Art and Geometry -- The Vitruvian Man -- The Golden Number -- The Geometry of A4 Paper Sizes -- The Strange Worlds of Escher -- Escher and the Möbius Strip -- Picasso, Einstein and the Fourth Dimension -- Pollock's Fractals -- Voronoi Diagrams -- The Platonic Solids -- Pythagorean Mosquitoes -- The Most Beautiful of All -- Mathematical Objects -- The Power of Math -- Doubts in the Realm of Certainty -- When Chance Enhances Reliability -- The Difficulty of Chance -- Conjectures and Proofs -- Mr. Benford -- Financial Fractals -- Turing's Test -- DNA Computers -- Magical Multiplication -- ? Day -- The Best Job in the World -- Out of this World -- Electoral Paradoxes -- The Melon Paradox -- The Cupcake Paradox -- Infinity -- Unfair Games --

Monsieur Bertrand -- Boy or Girl? -- A Puzzle for Christmas -- Crisis
Time for Easter Eggs.

Sommario/riassunto

This is a book of mathematical stories — funny and puzzling mathematical stories. They tell of villains who try to steal secrets, heroes who encode their messages, and mathematicians who spend years on end searching for the best way to pile oranges. There are also stories about highway confusions occurring when the rules of Cartesian geometry are ignored, small-change errors due to ignorance of ancient paradoxes, and mistakes in calendars arising from poor numerical approximations. This book is about the power and beauty of mathematics. It shows mathematics in action, explained in a way that everybody can understand. It is a book for enticing youngsters and inspiring teachers. Nuno Crato is a leading science writer and mathematician, whose entertaining essays have won a number of international awards.
