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Integers – Entertainment of Mathematical Kind -E28. The Erds Number and Hamiltonian Mysteries -- E29. One Old Erds–Turán Problem -- E30. Birth of a Problem: The Story of Creation in Seven Stages -- Movement 1. The Colorado Mathematical Olympiad is mathematics; it is sport; it is art. And it is also community, by Matthew Kahle -- Movement 2. I've begun paying off my debt with new kids, by Aaron Parsons -- Movement 3. Aesthetic of Personal Mastery, by Hannah Alpert -- Movement 4. Colorado Mathematical Olympiad: Reminiscences by Robert Ewell. .

Sommario/riassunto

Now in its third decade, the Colorado Mathematical Olympiad (CMO), founded by the author, has become an annual state-wide competition, hosting many hundreds of middle and high school contestants each year. This book presents a year-by-year history of the CMO from 2004–2013 with all the problems from the competitions and their solutions. Additionally, the book includes 10 further explorations, bridges from solved Olympiad problems to 'real' mathematics, bringing young readers to the forefront of various fields of mathematics. This book contains more than just problems, solutions, and event statistics — it tells a compelling story involving the lives of those who have been part of the Olympiad, their reminiscences of the past and successes of the present. I am almost speechless facing the ingenuity and inventiveness demonstrated in the problems proposed in the third decade of these Olympics. However, equally impressive is the drive and persistence of the originator and living soul of them. It is hard for me to imagine the enthusiasm and commitment needed to work singlehandedly on such an endeavor over several decades. —Branko Grünbaum, University of Washington After decades of hunting for Olympiad problems, and struggling to create Olympiad problems, he has become an extraordinary connoisseur and creator of Olympiad problems. The Olympiad problems were very good, from the beginning, but in the third decade the problems have become extraordinarily good. Every brace of 5 problems is a work of art. The harder individual problems range in quality from brilliant to work-of-genius… The same goes for the "Further Explorations" part of the book. Great mathematics and mathematical questions are immersed in a sauce of fascinating anecdote and reminiscence. If you could have only one book to enjoy while stranded on a desert island, this would be a good choice. — Peter D. Johnson, Jr., Auburn University Like Gauss, Alexander Soifer would not hesitate to inject Eureka! at the right moment. Like van der Waerden, he can transform a dispassionate exercise in logic into a compelling account of sudden insights and ultimate triumph. — Cecil Rousseau Chair, USA Mathematical Olympiad Committee A delightful feature of the book is that in the second part more related problems are discussed. Some of them are still unsolved. —Paul Erds The book is a gold mine of brilliant reasoning with special emphasis on the power and beauty of coloring proofs. Strongly recommended to both serious and recreational mathematicians on all levels of expertise. —Martin Gardner.