1.

Record Nr.	UNINA9910963942603321
Autore	Savchev Svetoslav
Titolo	Mathematical miniatures / / Svetoslav Savchev, Titu Andreescu
Pubbl/distr/stampa	Washington, D.C., : Mathematical Association of America, c2003
ISBN	0-88385-957-2
Edizione	[1st ed.]
Descrizione fisica	1 online resource (xi, 223 pages) : digital, PDF file(s)
Collana	Anneli Lax New Mathematical Library, , 2643-5586 ; ; v. 43 Anneli Lax new mathematical library ; ; v. 43
Altri autori (Persone)	AndreescuTitu <1956->
Disciplina	510
Soggetti	Mathematics Problem solving
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 contenuto	; 1. A telescoping sum -- ; 2. Lagrange's identity -- ; 3. Perfect squares -- ; 4. Lest common multiples -- ; 5. Trig substitutions -- Coffee break 1 -- ; 6. Popoviciu's theorem -- ; 7. Catalan's identity -- ; 8. Several inequalities -- ; 9. Vectors -- ; 10. Mathematical induction at work -- Coffee break 2 -- ; 11. A highly divisible determinant -- ; 12. Hermite's identity -- ; 13. Complete sequences -- ; 14. Three polynomials -- ; 15. More about induction -- Coffee break 3 -- ; 16. A classical identity -- ; 17. Multiplicative functions -- ; 18. The "arbitrary" Proizvolov -- ; 19. Holder's inequality -- ; 20. Symmetry -- Coffee break 4 -- ; 21. He knows I know he knows -- ; 22. A special inequality -- ; 23. Two inductive constructions -- ; 24. Some old-fashioned geometry -- ; 25. Extremal arguments -- Coffee break 5 -- ; 26. The AMS inequality -- ; 27. Helly's theorem for one dimension -- ; 28. Two approaches -- ; 29. Radical axis -- ; 30. The pigeonhole principle -- Coffee break 6 -- ; 31. The three jug problem -- ; 32. Rectifying trajectories -- ; 33. Numerical systems -- ; 34. More on polynomials -- ; 35. Geometric transformations -- Coffee break 7 -- ; 36. The Game of life problem -- ; 37. Tetrahedra with a point in common -- ; 38. Should we count -- ; 39. Let's count now -- ; 40. Some elementary number theory -- Coffee break 8 -- ; 41. Euclid's game -- ; 42. Perfect powers -- ; 43. The 2n-1 problem -- ; 44. The 2n+1 problem -- ; 45. The 3n problem -- Coffee break -- ; 46. Pairwise sums -- ; 47. Integer progressions -- ; 48.

Incomparable sets -- ; 49. Morse's sequence -- ; 50. A favorite of Erdos.

Sommario/riassunto   Mathematical Miniatures is a problem collection of arresting mathematical insight and ingenuity. The authors brought together materials from mathematical competitions, books, research papers, discussions, and their own work. Such mathematical substance went far beyond the purposes of a traditional problem-solving book. The most attractive results refused to fit into the schemes of an instruction manual meant to exemplify typical problem solving techniques. A broader interpretation of these problems had to be identified, and this book is the fruit of that effort.   Savchev and Andreescu detach certain statements or groups of related statements into independent sections. Treating these gems separately, in self-contained essays, emphasizes the source of their natural charm---connections with genuine mathematical experience. The essays are of impressive diversity, enlivened by fresh and original ideas. They involve concepts not only useful but also beautiful and nonstandard, with lots of esthetic appeal. The book is thus not so much a mathematical toolchest: it is an anthology of mathematical verse.

2.
Record Nr.	UNINA9910736085903321
Titolo	Infection : history / / National Geographic Television & Film
Pubbl/distr/stampa	New York, N.Y., : Infobase, [2005], c2001
Descrizione fisica	1 streaming video file (51 min.) : sd., col., digital
Collana	Kill or Cure: A History of Medical Treatment
Soggetti	Communicable diseases
	Diseases
	Infection
	Medical microbiology
	Self-care, Health
	Educational films.
	Internet videos.
	Videorecording
Lingua di pubblicazione	Inglese
Formato	Videoregistrazione
Livello bibliografico	Monografia
Nota di contenuto	Epidemics: AIDS & Bubonic Plague (4:48) -- Epidemics: Yellow Fever & Malaria (5:30) -- Infectious Disease: Syphilis (2:38) -- Discrimination During Epidemics (3:38) -- HIV and Treatment Economics (4:09) -- Pasteur's Breakthrough Discovery (3:08) -- Cholera and Public Health (2:01) -- Smallpox and Vaccination (3:29) -- Antibiotics and Antibiotic Resistance (4:55) -- Tuberculosis (4:50) -- Infectious Disease: Influenza (2:47) -- New Pathogens & Diseases (3:47) -- Global Microbes (1:57)
Sommario/riassunto	As a history of infection and contagion, this program tells a story of clever science and dumb luck, horror and hope. Filmed at locations worldwide, the video traces the battles fought against humanity's oldest foes: diseases such as yellow fever, malaria, syphilis, cholera, smallpox, tuberculosis, polio, and perhaps the deadliest pandemic of all, AIDS. Health workers and epidemiologists on the front lines discuss the dynamics of combating disease, particularly in Africa, where AIDS ravages the continent. The growing problem of antibiotic resistance is

also examined. Experts include Dr. David Ho, a virologist at the Pasteur Institute in Paris who has developed some of the most effective HIV drugs.