1. Record Nr. UNINA9910783120503321

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| Titolo | Solving polynomial equation systems . 1 The Kronecker-Duval philosophy / / Teo Mora [[electronic resource]] |
| Pubbl/distr/stampa | Cambridge : , : Cambridge University Press, , 2003 |
| ISBN | 1-280-41855-9<br>9786610418558<br>0-511-17888-3<br>1-139-14791-9<br>0-511-05816-0<br>0-511-30602-4<br>0-511-54283-6<br>0-511-07295-3 |
| Descrizione fisica | 1 online resource (xiii, 423 pages) : digital, PDF file(s) |
| Collana | Encyclopedia of mathematics and its applications ; ; 88 |
| Disciplina | 512.9/4 |
| Soggetti | Equations - Numerical solutions<br>Polynomials<br>Iterative methods (Mathematics) |
| Lingua di pubblicazione | Inglese |
| Formato | Materiale a stampa |
| Livello bibliografico | Monografia |
| Note generali | Title from publisher's bibliographic system (viewed on 31 May 2016). |
| Nota di bibliografia | Includes bibliographical references and index. |
| Nota di contenuto | 1. The Kronecker-Duval philosophy |
| Sommario/riassunto | Polynomial equations have been long studied, both theoretically and with a view to solving them. Until recently, manual computation was the only solution method and the theory was developed to accommodate it. With the advent of computers, the situation changed dramatically. Many classical results can be more usefully recast within a different framework which in turn lends itself to further theoretical development tuned to computation. This first book in a trilogy is devoted to the new approach. It is a handbook covering the classical theory of finding roots of a univariate polynomial, emphasising computational aspects, especially the representation and manipulation of algebraic numbers, enlarged by more recent representations like the Duval Model and the Thom Codification. Mora aims to show that solving a polynomial |

equation really means finding algorithms that help one manipulate roots rather than simply computing them; to that end he also surveys algorithms for factorizing univariate polynomials.