

COMPUTATIONAL METHODS IN COMMUTATIVE ALGEBRA AND ALGEBRAIC GEOMETRY



To get **Computational Methods in Commutative Algebra and Algebraic Geometry** PDF, remember to refer to the hyperlink listed below and save the file or gain access to other information that are relevant to **COMPUTATIONAL METHODS IN COMMUTATIVE ALGEBRA AND ALGEBRAIC GEOMETRY** book.

Book Condition: New. Publisher/Verlag: Springer, Berlin | This ACM volume in computational algebra deals with methods and techniques to tackle problems that can be represented by data structures which are essentially matrices with polynomial entries, mediated by the disciplines of commutative algebra and algebraic geometry. It relates discoveries by a growing, interdisciplinary, group of researchers in the past decade. It highlights the use of advanced techniques to bring down the cost of computation. The book includes concrete algorithms written in MACAULAY. It is intended for advanced students and researchers with interests both in algebra and computation. Many parts of it can be read by anyone with a basic abstract algebra course. | 1 Fundamental Algorithms.- 1.1 Gröbner Basics.- 1.2 Division Algorithms.- 1.3 Computation of Syzygies.- 1.4 Hilbert Functions.- 1.5 Computer Algebra Systems.- 2 Toolkit.- 2.1 Elimination Techniques.- 2.2 Rings of Endomorphisms.- 2.3 Noether Normalization.- 2.4 Fitting Ideals.- 2.5 Finite and Quasi-Finite Morphisms.- 2.6 Flat Morphisms.- 2.7 Cohen-Macaulay Algebras.- 3 Principles of Primary Decomposition.- 3.1 Associated Primes and Irreducible Decomposition.- 3.2 Equidimensional Decomposition of an Ideal.- 3.3 Equidimensional Decomposition Without Exts.- 3.4 Mixed Primary Decomposition.- 3.5 Elements of Factorizers.- 4 Computing in Artin Algebras.- 4.1 Structure of Artin Algebras.- 4.2 Zero-Dimensional Ideals.- 4.3 Idempotents versus Primary Decomposition.- 4.4 Decomposition via Sampling.- 4.5 Root Finders.- 5 Nullstellensätze.- 5.1 Radicals via Elimination.- 5.2 Modules of Differentials and Jacobian Ideals.- 5.3 Generic Socles.- 5.4 Explicit Nullstellensätze.- 5.5 Finding Regular Sequences.- 5.6 Top Radical and Upper Jacobians.- 6 Integral Closure.- 6.1 Integrally Closed Rings.- 6.2 Multiplication Rings.- 6.3 S2-ification of an Affine Ring.- 6.4 Desingularization in Codimension One.- 6.5 Discriminants and Multipliers.- 6.6 Integral Closure of an Ideal.- 6.7 Integral Closure of a Morphism.- 7 Ideal Transforms and Rings of Invariants.- 7.1 Divisorial Properties of Ideal Transforms.- 7.2 Equations of Blowup Algebras.- 7.3 Subrings.- 7.4...



Read Computational Methods in Commutative Algebra and Algebraic Geometry Online



Download PDF Computational Methods in Commutative Algebra and Algebraic Geometry



Download ePUB Computational Methods in Commutative Algebra and Algebraic Geometry

Other PDFs



[PDF] Alfred s Kid s Guitar Course 1: The Easiest Guitar Method Ever!, Book, DVD Online Audio, Video Software

Click the web link below to download and read "Alfred s Kid s Guitar Course 1: The Easiest Guitar Method Ever!, Book, DVD Online Audio, Video Software" file.

[Download ePub »](#)



[PDF] Kindergarten Culture in the Family and Kindergarten; A Complete Sketch of Froebel s System of Early Education, Adapted to American Institutions. for the Use of Mothers and Teachers

Click the web link below to download and read "Kindergarten Culture in the Family and Kindergarten; A Complete Sketch of Froebel s System of Early Education, Adapted to American Institutions. for the Use of Mothers and Teachers" file.

[Download ePub »](#)



[PDF] Hands Free Mama: A Guide to Putting Down the Phone, Burning the To-Do List, and Letting Go of Perfection to Grasp What Really Matters!

Click the web link below to download and read "Hands Free Mama: A Guide to Putting Down the Phone, Burning the To-Do List, and Letting Go of Perfection to Grasp What Really Matters!" file.

[Download ePub »](#)



[PDF] Read Write Inc. Phonics: Set 7 Non-Fiction 3 the Ice and Snow Book

Click the web link below to download and read "Read Write Inc. Phonics: Set 7 Non-Fiction 3 the Ice and Snow Book" file.

[Download ePub »](#)



[PDF] The Garden After the Rain: Bedtime Story and Activity Book for Children 4-8 Years

Click the web link below to download and read "The Garden After the Rain: Bedtime Story and Activity Book for Children 4-8 Years" file.

[Download ePub »](#)



[PDF] Highlighted in Yellow: A Short Course In Living Wisely And Choosing Well

Click the web link below to download and read "Highlighted in Yellow: A Short Course In Living Wisely And Choosing Well" file.

[Download ePub »](#)

**[PDF] Read Write Inc. Phonics: Blue Set 6 Storybook 1 Barker**

Access the link beneath to get "Read Write Inc. Phonics: Blue Set 6 Storybook 1 Barker" document.

[Read eBook »](#)

**[PDF] Read Write Inc. Phonics: Green Set 1 Non-Fiction 3 Let s Go!**

Access the link beneath to get "Read Write Inc. Phonics: Green Set 1 Non-Fiction 3 Let s Go!" document.

[Read eBook »](#)

**[PDF] TJ new concept of the Preschool Quality Education Engineering: new happy learning young children (3-5 years old) daily learning book Intermediate (2)(Chinese Edition)**

Access the link beneath to get "TJ new concept of the Preschool Quality Education Engineering: new happy learning young children (3-5 years old) daily learning book Intermediate (2)(Chinese Edition)" document.

[Read eBook »](#)

**[PDF] Read Write Inc. Phonics: Green Set 1 Storybook 6 Tug, Tug**

Access the link beneath to get "Read Write Inc. Phonics: Green Set 1 Storybook 6 Tug, Tug" document.

[Read eBook »](#)

**[PDF] Read Write Inc. Phonics: Green Set 1 Storybook 3 Six Fish**

Access the link beneath to get "Read Write Inc. Phonics: Green Set 1 Storybook 3 Six Fish" document.

[Read eBook »](#)

**[PDF] Read Write Inc. Phonics: Purple Set 2 Storybook 3 Big Blob and Baby Blob**

Access the link beneath to get "Read Write Inc. Phonics: Purple Set 2 Storybook 3 Big Blob and Baby Blob" document.

[Read eBook »](#)