When people should go to the books stores, search establishment by shop, shelf by shelf, it is essentially problematic. This is why we allow the book compilations in this website. It will entirely ease you to see guide rings and modules of quotients as you such as.

By searching the title, publisher, or authors of guide you really want, you can discover them rapidly. In the house, workplace, or perhaps in your method can be all best place within net connections. If you intend to download and install the rings and modules of quotients, it is agreed simple then, previously currently we extend the partner to purchase and make bargains to download and install rings and modules of quotients fittingly simple!

Rings and Modules of Quotients-B. Stenström 2006-11-15

Lectures on Injective Modules and Quotient Rings-Carl Faith 2006-11-14

Rings of Quotients-B. Stenström 2012-12-06
The theory of rings of quotients has its origin in the work of (j). Ore and K. Asano on the construction of the total ring of fractions, in the 1930's and 40's. But the subject did not really develop until the end of the 1950's, when a number of important papers appeared (by R. E. Johnson, Y. Utumi, A. W. Goldie, P. Gabriel, J. Lambek, and others). Since then the progress has been rapid, and the subject has by now attained a stage of maturity, where it is possible to make a systematic account of it (which is the purpose of this book). The most immediate example of a ring of quotients is the field of fractions $Q$ of a commutative integral domain $A$. It may be characterized by the two properties: (i) For every $q \in Q$ there exists a non-zero $SEA$ such that $qSEA$. (ii) $Q$ is the maximal over-ring of $A$ satisfying condition (i). The well-known construction of $Q$ can be immediately extended to the case when $A$ is an arbitrary commutative ring and $S$ is a multiplicatively closed set of non-zero-divisors of $A$. In that case one defines the ring of fractions $Q = A[S-\{0\}]$ as consisting of pairs $(a, s)$ with $aEA$ and $SES$, with the declaration that $(a, s) = (b, t)$ if there exists $UES$ such that $uta = usb$. The resulting ring $Q$ satisfies (i), with the extra requirement that $SES$, and (ii).

Lectures on Rings and Modules-Joachim Lambek 2009 Due to their clarity and intelligible presentation, these lectures on rings and modules are a particularly successful introduction to the surrounding circle of ideas. -- Zentralblatt MATH This book is an introduction to the theory of associative rings and their modules, designed primarily for graduate students. The standard topics on the structure of rings are covered, with a particular emphasis on the concept of the complete ring of quotients. A survey of the fundamental concepts of algebras in the first chapter helps to make the treatment self-contained. The topics covered include selected results on Boolean and other commutative rings, the classical structure theory of associative rings, injective modules, and rings of quotients. The final chapter provides an introduction to homological algebra. Besides three appendices on further results, there is a six-page section of historical comments.

Injective Modules and Injective Quotient Rings-Carl Faith 2019-08-21 First published in 1982. These lectures are in two parts. Part I, entitled injective Modules Over Levitzki Rings, studies an injective module $E$ and chain conditions on the set $A^E(R)$ of right ideals annihilated by subsets of $E$. Part II is on the subject of (F)PF, or (finitely) pseudo-Frobenius, rings [i.e., all (finitely generated) faithful modules generate the category mod-$R$ of all $R$-modules]. (The PF rings had been introduced by Azumaya as a generalization of quasi-Frobenius rings, but FPF includes infinite products of Prufer domains, e.g., $Z \oplus$.)

Lectures on Modules and Rings-Tsit-Yuen Lam 2012-12-06 This new book can be read.
independently from the first volume and may be used for lecturing, seminar- and self-study, or for general reference. It focuses more on specific topics in order to introduce readers to a wealth of basic and useful ideas without the hindrance of heavy machinery or undue abstractions. User-friendly with its abundance of examples illustrating the theory at virtually every step, the volume contains a large number of carefully chosen exercises to provide newcomers with practice, while offering a rich additional source of information to experts. A direct approach is used in order to present the material in an efficient and economic way, thereby introducing readers to a considerable amount of interesting ring theory without being dragged through endless preparatory material.

Rings and Modules of Quotients-B. Stenstrom 2014-09-01

Lectures on Rings and Modules-Joachim Lambek 1966

Module Theory-Alberto Facchini 2013-11-27
This expository monograph was written for three reasons. Firstly, we wanted to present the solution to a problem posed by Wolfgang Krull in 1932 [Krull 32]. He asked whether what we now call the "Krull-Schmidt Theorem" holds for artinian modules. The problem remained open for 63 years: its solution, a negative answer to Krull's question, was published only in 1995 (see [Facchini, Herbera, Levy and Vamos]). Secondly, we wanted to present the answer to a question posed by Warfield in 1975 [Warfield 75]. He proved that every finitely presented module over a serial ring is a direct sum of uniserial modules, and asked if such a decomposition was unique. In other words, Warfield asked whether the "Krull-Schmidt Theorem" holds for serial modules. The solution to this problem, a negative answer again, appeared in [Facchini 96]. Thirdly, the solution to Warfield's problem shows interesting behavior, a rare phenomenon in the history of Krull-Schmidt type theorems. Essentially, the Krull-Schmidt Theorem holds for some classes of modules and not for others. When it does hold, any two indecomposable decompositions are uniquely determined up to a permutation, and when it does not hold for a class of modules, this is proved via an example. For serial modules the Krull-Schmidt Theorem does not hold, but any two indecomposable decompositions are uniquely determined up to two permutations. We wanted to present such a phenomenon to a wider mathematical audience.

Modules and the Structure of Rings-Golan 2017-10-19 This textbook is designed for students with at least one solid semester of abstract algebra, some linear algebra background, and no previous knowledge of module theory. Modules and the Structure of Rings details the use of modules over a ring as a means of considering the structure of the ring itself—explaining the mathematics and "inductive reasoning" used in working on ring theory challenges and emphasizing modules instead of rings. Stressing the inductive aspect of mathematical research underlying the formal deductive style of the literature, this volume offers vital background on current methods for solving hard classification problems of algebraic structures. Written in an informal but completely rigorous style, Modules and the Structure of Rings clarifies sophisticated proofs ... avoids the formalism of category theory ... aids independent study or seminar work ... and supplies end-of-chapter problems. This book serves as an excellent primary text for upper-level undergraduate and graduate students in one-semester courses on ring or module theory—laying a foundation for more advanced study of homological algebra or module theory.

Rings and Their Modules-Paul E. Bland 2011
This book is an introduction to the theory of rings and modules that goes beyond what one normally obtains in a graduate course in abstract algebra. In addition to the presentation of standard topics in ring and module theory, it also covers category theory, homological algebra and even more specialized topics like injective envelopes and projective covers, reflexive modules and quasi-Frobenius rings, and graded rings and modules. The book is a self-contained volume written in a very systematic style: all proofs are clear and easy for the reader to understand and all arguments are based on materials contained in the book. A problem sets follow each section. It is suitable for graduate and PhD students who have chosen ring theory for their research subject.

Rings and modules of quotients-Bo Stenström 1971
A Course in Ring Theory-Donald S. Passman
2004-09-28 Projective modules: Modules and homomorphisms Projective modules Completely reducible modules Wedderburn rings Artinian rings Hereditary rings Dedekind domains Projective dimension Tensor products Local rings Polynomial rings: Skew polynomial rings Grothendieck groups Graded rings and modules Induced modules Syzygy theorem Patching theorem Serre conjecture Big projectives Generic flatness Nullstelleinsatz Injective modules: Injective modules Injective dimension Essential extensions Maximal ring of quotients Classical ring of quotients Goldie rings Uniform dimension Uniform injective modules Reduced rank Index

Exercises in Modules and Rings-T.Y. Lam
2009-12-08 This volume offers a compendium of exercises of varying degree of difficulty in the theory of modules and rings. It is the companion volume to GTM 189. All exercises are solved in full detail. Each section begins with an introduction giving the general background and the theoretical basis for the problems that follow.

Ring and Module Theory-Toma Albu
2011-02-04 This book is a collection of invited papers and articles, many presented at the 2008 International Conference on Ring and Module Theory. The papers explore the latest in various areas of algebra, including ring theory, module theory and commutative algebra.

Modules and the Structure of Rings-Golan
2017-10-19 This textbook is designed for students with at least one solid semester of abstract algebra, some linear algebra background, and no previous knowledge of module theory. Modules and the Structure of Rings details the use of modules over a ring as a means of considering the structure of the ring itself—explaining the mathematics and "inductive reasoning" used in working on ring theory challenges and emphasizing modules instead of rings. Stressing the inductive aspect of mathematical research underlying the formal deductive style of the literature, this volume offers vital background on current methods for solving hard classification problems of algebraic structures. Written in an informal but completely rigorous style, Modules and the Structure of Rings clarifies sophisticated proofs ... avoids the formalism of category theory ... aids independent study or seminarwork ... and supplies end-of-chapter problems. This book serves as an excellent primary text for upper-level undergraduate and graduate students in one-semester courses on ring or module theory—laying a foundation for more advanced study of homological algebra or module theory.

Introduction To Commutative Algebra-Michael Atiyah
2018-03-09 First Published in 2018. Routledge is an imprint of Taylor & Francis, an Informa company.

Rings and Categories of Modules-F.W. Anderson
2012-12-06 This book is intended to provide a reasonably self-contained account of a major portion of the general theory of rings and modules suitable as a text for introductory and more advanced graduate courses. We assume the familiarity with rings usually acquired in standard undergraduate algebra courses. Our general approach is categorical rather than arithmetical. The continuing theme of the text is the study of the relationship between the one-sided ideal structure that a ring may possess and the behavior of its categories of modules. Following a brief outline of set-theoretic and categorical foundations, the text begins with the basic definitions and properties of rings, modules and homomorphisms and ranges through comprehensive treatments of direct sums, finiteness conditions, the Wedderburn-Artin Theorem, the Jacobson radical, the hom and tensor functions, Morita equivalence and duality, decomposition theory of injective and projective modules, and semiperfect and perfect rings. Both to illustrate the text and to extend it we have included a substantial number of exercises covering a wide spectrum of difficulty. There are, of course, many important areas of ring and module theory that the text does not touch upon. For example, we have made no attempt to cover such subjects as homology, rings of quotients, or commutative ring theory.

Integral Closure of Ideals, Rings, and Modules-Craig Huneke
2006-10-12 Ideal for graduate students and researchers, this book presents a unified treatment of the central notions of integral closure.
Extensions of Rings and Modules-Gary F. Birkenmeier 2013-07-19 The "extensions" of rings and modules have yet to be explored in detail in a research monograph. This book presents state of the art research and also stimulating new and further research. Broken into three parts, Part I begins with basic notions, terminology, definitions and a description of the classes of rings and modules. Part II considers the transference of conditions between a base ring or module and its extensions. And Part III utilizes the concept of a minimal essential extension with respect to a specific class (a hull). Mathematical interdisciplin ary applications appear throughout. Major applications of the ring and module theory to Functional Analysis, especially C*-algebras, appear in Part III, make this book of interest to Algebra and Functional Analysis researchers. Notes and exercises at the end of every chapter, and open problems at the end of all three parts, lend this as an ideal textbook for graduate or advanced undergraduate students.

Lattice-ordered Rings and Modules-Stuart A. Steinberg 2009-11-19 This book provides an exposition of the algebraic aspects of the theory of lattice-ordered rings and lattice-ordered modules. All of the background material on rings, modules, and lattice-ordered groups necessary to make the work self-contained and accessible to a variety of readers is included. Filling a gap in the literature, Lattice-Ordered Rings and Modules may be used as a textbook or for self-study by graduate students and researchers studying lattice-ordered rings and lattice-ordered modules. Steinberg presents the material through 800+ extensive examples of varying levels of difficulty along with numerous exercises at the end of each section. Key topics include: lattice-ordered groups, rings, and fields; archimedean $S$-groups; f-rings and larger varieties of $S$-rings; the category of f-modules; various commutativity results.

Ring Theory; Proceedings-Robert Gordon 1972

Introduction to Ring Theory-Paul M. Cohn 2012-12-06 A clear and structured introduction to the subject. After a chapter on the definition of rings and modules there are brief accounts of Artinian rings, commutative Noetherian rings and ring constructions, such as the direct product, Tensor product and rings of fractions, followed by a description of free rings. Readers are assumed to have a basic understanding of set theory, group theory and vector spaces. Over two hundred carefully selected exercises are included, most with outline solutions.

Introduction to Rings and Modules-C. Musili 1994 This book is a self-contained elementary introduction to rings and modules, and should be useful for courses on Algebra. The emphasis is on concept development with adequate examples and counter-examples drawn from topics such as analysis, topology, etc. The entire material, including exercises, is fully class tested.

Algebra-Carl Faith 2012-12-06 VI of Oregon lectures in 1962, Bass gave simplified proofs of a number of "Morita Theorems", incorporating ideas of Chase and Schanuel. One of the Morita theorems characterizes when there is an equivalence of categories $mod-A \cong mod-B$ for two rings $A$ and $B$. Morita's solution organizes ideas so efficiently that the classical Wedderburn-Artin theorem is a simple consequence, and moreover, a similarity class $[AJ$ in the Brauer group $Br(k)$ of Azumaya algebras over a commutative ring $k$ consists of all algebras $B$ such that the corresponding categories $mod-A \cong mod-B$ consisting of $k$-linear morphisms are equivalent by a $k$-linear functor. (For fields, $Br(k)$ consists of similarity classes of simple central algebras, and for arbitrary commutative $k$, this is subsumed under the Azumaya $[51]$ and Auslander-Goldman $[60]$ Brauer group.) Numerous other instances of a wedding of ring theory and category (albeit a shot gun wedding!) are contained in the text. Furthermore, in. my attempt to further simplify proofs, notably to eliminate the need for tensor products in Bass's exposition, I uncovered a vein of ideas and new theorems lying wholly within ring theory. This constitutes much of Chapter 4 -the Morita theorem is Theorem 4.29-and the basis for it is a correspondence theorem for projective modules (Theorem 4.7) suggested by the Morita context. As a by-product, this provides foundation for a rather complete theory of simple Noetherian rings-but more about this in the introduction.
Algebras, Rings and Modules - Michiel Hazewinkel 2004-10-01 The text of the first volume of the book covers the major topics in ring and module theory and includes both fundamental classical results and more recent developments. The basic tools of investigation are methods from the theory of modules, which allow a very simple and clear approach both to classical and new results. An unusual main feature of this book is the use of the technique of quivers for studying the structure of rings. A considerable part of the first volume of the book is devoted to a study of special classes of rings and algebras, such as serial rings, hereditary rings, semidistributive rings and tiled orders. Many results of this text until now have been available in journal articles only. This book is aimed at graduate and post-graduate students and for all mathematicians who use algebraic techniques in their work. This is a self-contained book which is intended to be a modern textbook on the structure theory of associative rings and algebras and is suitable for independent study.


On Graded Rings and Modules of Quotients - F. Van Oystaeyen 1977

Injective Modules and Injective Quotient Rings - Carl Faith 2019-08-21 First published in 1982. These lectures are in two parts. Part I, entitled injective Modules Over Levitzki Rings, studies an injective module E and chain conditions on the set A^(E,R) of right ideals annihilated by subsets of E. Part II is on the subject of (F)PF, or (finitely) pseudo-Frobenius, rings [i.e., all (finitely generated) faithful modules generate the category mod-R of all R-modules]. (The PF rings had been introduced by Azumaya as a generalization of quasi-Frobenius rings, but FFP includes infinite products of Prufer domains, e.g., Z w.)

Ring Theory - Kenneth Goodearl 1976-03-01

Groups, Rings And Modules With Applications - M.R. Adhikari 2003

Rings of Quotients and Quotient Modules - Cathleen Clare Real 1968

Modules of Quotients and Classical Quotient Rings - Daniel C. Sims 1972 Our overall purpose in this thesis will be to extend Ore's Condition to modules and then to apply those conditions to rings.

Commutative Rings whose Finitely Generated Modules Decompose - W. Brandal 2006-11-15


On Rings and Modules of Quotients - John Austin Roberts 1984

A Course in Finite Group Representation Theory - Peter Webb 2016-08-19 This graduate-level text provides a thorough grounding in the representation theory of finite groups over fields and rings. The book provides a balanced and comprehensive account of the subject, detailing the methods needed to analyze representations that arise in many areas of mathematics. Key topics include the construction and use of character tables, the role of induction and restriction, projective and simple modules for group algebras, indecomposable representations, Brauer characters, and block theory. This classroom-tested text provides motivation through a large number of worked examples, with exercises at the end of each chapter that test the reader's knowledge, provide further examples and practice, and include results not proven in the text. Prerequisites include a graduate course in abstract algebra, and familiarity with the properties of groups, rings, field extensions, and linear algebra.

Basic Algebra - P.M. Cohn 2012-12-06 This is the first volume of a revised edition of P.M. Cohn’s classic three-volume text Algebra, widely regarded as one of the most outstanding introductory algebra textbooks. This volume covers the important results of algebra. Readers
should have some knowledge of linear algebra, groups and fields, although all the essential facts and definitions are recalled.

**Algebraic Geometry and Arithmetic Curves**
Qing Liu 2006-06-29 This book is a general introduction to the theory of schemes, followed by applications to arithmetic surfaces and to the theory of reduction of algebraic curves. The first part introduces basic objects such as schemes, morphisms, base change, local properties (normality, regularity, Zariski's Main Theorem). This is followed by the more global aspect: coherent sheaves and a finiteness theorem for their cohomology groups. Then follows a chapter on sheaves of differentials, dualizing sheaves, and Grothendieck's duality theory. The first part ends with the theorem of Riemann-Roch and its application to the study of smooth projective curves over a field. Singular curves are treated through a detailed study of the Picard group. The second part starts with blowing-ups and desingularisation (embedded or not) of fibered surfaces over a Dedekind ring that leads on to intersection theory on arithmetic surfaces. Castelnuovo's criterion is proved and also the existence of the minimal regular model. This leads to the study of reduction of algebraic curves. The case of elliptic curves is studied in detail. The book concludes with the fundamental theorem of stable reduction of Deligne-Mumford. The book is essentially self-contained, including the necessary material on commutative algebra. The prerequisites are therefore few, and the book should suit a graduate student. It contains many examples and nearly 600 exercises.