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	Soggetti	Matrix theory
		Algebra
		Associative rings
		Rings (Algebra)
		Commutative algebra
		Commutative rings
		Nonassociative rings
		Group theory
		Number theory
		Linear and Multilinear Algebras, Matrix Theory
		Associative Rings and Algebras
		Commutative Rings and Algebras
		Non-associative Rings and Algebras
		Group Theory and Generalizations
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	Nota di contenuto	Chapter 1. Vector Space -- Chapter 2. Matrices and Linear Equations -- Chapter 3. Linear Transformations -- Chapter 4. Inner Product Space -- Chapter 5. Determinants and Forms -- Chapter 6. Canonical Forms, Jordan and Rational Forms -- Chapter 7. General Linear Algebra -- Chapter 8. Field Theory, Galois Theory -- Chapter 9. Representation Theory of Finite Groups -- Chapter 10. Group Extensions and Schur Multiplier.

Sommario/riassunto

This is the second in a series of three volumes dealing with important topics in algebra. Volume 2 is an introduction to linear algebra (including linear algebra over rings), Galois theory, representation theory, and the theory of group extensions. The section on linear algebra (chapters 1–5) does not require any background material from Algebra 1, except an understanding of set theory. Linear algebra is the most applicable branch of mathematics, and it is essential for students of science and engineering As such, the text can be used for one-semester courses for these students. The remaining part of the volume discusses Jordan and rational forms, general linear algebra (linear algebra over rings), Galois theory, representation theory (linear algebra over group algebras), and the theory of extension of groups follow linear algebra, and is suitable as a text for the second and third year students specializing in mathematics. .