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| Autore | Andreescu Titu |
| Titolo | Essential Linear Algebra with Applications : A Problem-Solving Approach // by Titu Andreescu |
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| ISBN | 0-8176-4636-1 |
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| Descrizione fisica | 1 online resource (X, 491 p. 2 illus. in color.) |
| Classificazione | 31.12 |
| Disciplina | 512.5 |
| Soggetti | Matrix theory Algebra Applied mathematics Engineering mathematics Game theory Computer science—Mathematics Linear and Multilinear Algebras, Matrix Theory Applications of Mathematics Game Theory, Economics, Social and Behav. Sciences Mathematical and Computational Engineering Math Applications in Computer Science |
| Lingua di pubblicazione | Inglese |
| Formato | Materiale a stampa |
| Livello bibliografico | Monografia |
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| Nota di bibliografia | Includes bibliographical references. |
| Nota di contenuto | Preface -- Linear Phenomena and Euclidean Spaces of Small Dimension -- Concrete Vector Spaces -- Vector Spaces and Subspaces -- Linear Transformations -- More Matrix Algebra and Determinants -- General Theory of Linear Equations -- Eigenvectors -- Orthogonality -- Forms -- Vector Spaces over Finite Fields -- Appendix A: Complex Numbers -- Appendix B: Polynomials over Complex Numbers -- References -- Index. |
| Sommario/riassunto | This textbook provides a rigorous introduction to linear algebra in addition to material suitable for a more advanced course while emphasizing the subject's interactions with other topics in mathematics such as calculus and geometry. A problem-based |

approach is used to develop the theoretical foundations of vector spaces, linear equations, matrix algebra, eigenvectors, and orthogonality. Key features include: • a thorough presentation of the main results in linear algebra along with numerous examples to illustrate the theory; • over 500 problems (half with complete solutions) carefully selected for their elegance and theoretical significance; • an interleaved discussion of geometry and linear algebra, giving readers a solid understanding of both topics and the relationship between them. Numerous exercises and well-chosen examples make this text suitable for advanced courses at the junior or senior levels. It can also serve as a source of supplementary problems for a sophomore-level course.
