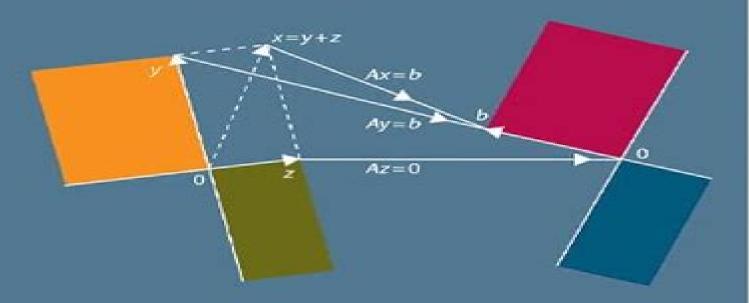
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# **Linear Mathematics An Introduction To Linear Al**

**Leonid Mirsky** 

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Linear Mathematics; an Introduction to Linear Algebra and Linear Differential Equations Fred Brauer, John A. Nohel, Hans Schneider, 1970 A Modern Introduction to Linear Algebra Henry Ricardo, 2009-10-21 Useful Concepts and Results at the Heart of Linear AlgebraA one or two semester course for a wide variety of students at the sophomore junior undergraduate levelA Modern Introduction to Linear Algebra provides a rigorous yet accessible matrix oriented introduction to the essential concepts of linear algebra Concrete easy to understand examples m **Introduction to Linear Algebra** Serge Lang, 2012-12-06 This is a short text in linear algebra intended for a one term course In the first chapter Lang discusses the relation between the geometry and the algebra underlying the subject and gives concrete examples of the notions which appear later in the book He then starts with a discussion of linear equations matrices and Gaussian elimination and proceeds to discuss vector spaces linear maps scalar products determinants and eigenvalues The book contains a large number of exercises some of the routine computational type while others are conceptual Introduction to Linear Algebra Gilbert Strang, 2016-08-11 Linear algebra is something all mathematics undergraduates and many other students in subjects ranging from engineering to economics have to learn The fifth edition of this hugely successful textbook retains all the qualities of earlier editions while at the same time seeing numerous minor improvements and major additions The latter

include A new chapter on singular values and singular vectors including ways to analyze a matrix of data A revised chapter on computing in linear algebra with professional level algorithms and code that can be downloaded for a variety of languages A new section on linear algebra and cryptography A new chapter on linear algebra in probability and statistics A dedicated and active website also offers solutions to exercises as well as new exercises from many different sources including practice problems exams and development of textbook examples plus codes in MATLAB Julia and Python **Introduction to Linear** Algebra and Differential Equations John W. Dettman, 1986-01-01 Excellent introductory text for students with one year of calculus Topics include complex numbers determinants orthonormal bases symmetric and hermitian matrices first order non linear equations linear differential equations Laplace transforms Bessel functions and boundary value problems Includes 48 black and white illustrations Exercises with solutions Index An Introduction to Linear Algebra Leonid Mirsky, 1990-01-01 The straight forward clarity of the writing is admirable American Mathematical Monthly This work provides an elementary and easily readable account of linear algebra in which the exposition is sufficiently simple to make it equally useful to readers whose principal interests lie in the fields of physics or technology. The account is self-contained and the reader is not assumed to have any previous knowledge of linear algebra Although its accessibility makes it suitable for non mathematicians Professor Mirsky s book is nevertheless a systematic and rigorous development of the subject Part I deals with determinants vector spaces matrices linear equations and the representation of linear operators by matrices Part II begins with the introduction of the characteristic equation and goes on to discuss unitary matrices linear groups functions of matrices and diagonal and triangular canonical forms Part II is concerned with quadratic forms and related concepts Applications to geometry are stressed throughout and such topics as rotation reduction of quadrics to principal axes and classification of quadrics are treated in some detail An account of most of the elementary inequalities arising in the theory of matrices is also included Among the most valuable features of the book are the numerous examples and problems at the end of each chapter carefully selected to clarify points made in the text Linear Algebra Richard Bronson, 1995-06-12 In this appealing and well written text Richard Bronson gives readers a substructure for a firm understanding of the abstract concepts of linear algebra and its applications. The author starts with the concrete and computational a 3 x 5 matrix describing a stores inventory and leads the reader to a choice of major applications Markov chains least squares approximation and solution of differential equations using Jordan normal form The first three chapters address the basics matrices vector spaces and linear transformations The next three cover eigenvalues Euclidean inner products and Jordan canonical forms offering possibilities that can be tailored to the instructors taste and to the length of the course Bronsons approach to computation is modern and algorithmic and his theory is clean and straightforward Throughout the views of the theory presented are broad and balanced Key material is highlighted in the text and summarized at end of each chapter The book also includes ample exercises with answers and hints With its inclusion of all the needed pedagogical features this text

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