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**Linear algebra gems. Assets for undergraduate mathematics.**

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Undergraduate linear algebra is both beautiful and replete with real world applications and connections to the rest of mathematics. The purpose of the present volume is to enrich the understanding of linear algebra for a wide audience by placing a broad collection of short items in the hands of teachers, students, and others who enjoy the subject. Because undergraduate linear algebra is so fundamental to the mathematics curriculum, it is often taught by non-specialists and specialists alike. This volume offers clever ways in which core ideas can be presented to their students by all teachers. Most articles are accessible to those with modest preparation in linear algebra, including beginning students. However, many items will also contain pleasant surprises even to those well-versed in the subject. The editors have combed through the literature to find expository articles and problems to enrich the reader's understanding. The 73 articles selected are organized into nine sections with over 120 problems grouped into subject categories as a tenth section. Contributors to the volume include experts in the field and long-time teachers of linear algebra. The book was prepared as part of a broad contract with the National Science Foundation to improve undergraduate linear algebra education.

*Classification:* H65