

Book Notes

Linear Algebra Done Right

Sheldon Axler

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1 Vector Spaces

Linear algebra is the study of linear maps on finite-dimensional vector spaces. Vector spaces are defined in this chapter, and their basic properties are developed. Vector spaces are a generalization of the description of a plane using two coordinates, as published by Descartes in 1637.

1.1 \mathbf{R}^n , \mathbf{C}^n , and \mathbf{F}^n

Complex Numbers

A **complex number** is an ordered pair $(a, b) \in \mathbf{R}^2$, denoted $a + bi$.