

the primary text for a probability unit in National Science Foundation Institutes for secondary school mathematics teachers." Rather its merit seems to be a clear, pleasant, and non-standard presentation which will be of value to any student with high school mathematics trying to get a glimpse of the subject of probability.

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Mathematische Statistik (Die Grundlehren der mathematischen Wissenschaften, Bd 87), by B. L. van der Waerden. Springer-Verlag, Berlin, Heidelberg, New York, 1965. xii + 360 pages. Price:DM 49, 60.

This second edition of Professor van der Waerden's book is essentially a reprint of the first edition (Springer-Verlag, 1957), which has had a considerable success as an introductory text in statistics for the mathematically minded student with fair mathematical background, including some knowledge of complex function theory. However, knowledge of Lebesgue integration and of matrix theory is not assumed.

The chapters are written with the intention to be independent of one another. Proofs of some theorems, readily available elsewhere, are omitted. At the same time the book is a logical unity in the sense that it is based entirely upon the Kolmogorov axioms of probability given in the first chapter, and on the fundamental notions developed in the first two chapters.

The chapters are: general foundations; probability and frequency; mathematical tools; empirical determination of distribution, mean and variance; Fourier integrals and limit theorems; Gaussian variables and Student's test, least squares; estimation; evaluation of observed frequencies; bio-assay; tests of hypothesis; rank tests; correlation. A collection of frequently used tables is included and many examples of application are also given.

It is regrettable, though understandable, that important topics - such as sequential test, theory of statistical decision functions, stochastic processes - had to be left out from both editions of this introductory text.

The book is highly recommended as a logical, mathematically sound introduction to the classical chapters of mathematical statistics.

Miklos Csorgo, McGill University

The Theory of Sets and Transfinite Arithmetic, by Alexander Abian. W. B. Saunders Company, Philadelphia and London, 1965. ix + 406 pages. \$10.80.

This seems to be an almost ideal textbook for a course which in-