8[G, Z].—FRANZ E. HOHN, *Applied Boolean Algebra, An Elementary Introduction,* The Macmillan Company, New York, 1960, xx + 139 p. $2.50 (paperback, offset print).

The author gives as much information as it seems possible to include conveniently in a text of this length starting with the veriest elements concerning the use of Boolean algebra in the design of switching circuits—especially for digital computers.

Examples of engineering applications are given, but no complete design of a very extensive arithmetic unit is undertaken. Hence, the ultimate dependence of the designers of computers on Boolean algebra is not completely illustrated, although it is strongly and correctly implied.

The crux of any applications of Boolean algebra to the design of switching circuits lies in computational schemes for writing fairly efficient statements of Boolean propositions. This problem is faced by the author, but only to an extent which permits the reader (and problem worker) to understand the nature of the difficulties which are encountered and some of the procedures which promise to be helpful. In this regard the pamphlet is no less informative than most of the other textbook material available, but additional reference to computational efforts would have been welcome.

The electrical elements to be used are described abstractly in a reasonable way, and altogether the presentation is self-contained, lucid, and reasonably illustrated by problems. No sophistication is required in the reader except for motivation.

Attention is not restricted to circuit design, and the standard applications of Boolean algebra are treated to an extent which is indicated in the chapter headings listed below:

> Introduction
> Boolean Algebra as a Model of Combinational Relay Circuitry
> Boolean Algebra as a Model of Propositional Logic
> The Boolean Algebra of the Subsets of a Set
> The Minimization Problem
> The Binary System of Numeration (Appendix I)
> Semiconductor Logic Elements (Appendix II)

It would have been helpful if the author had included various alternate notations. He uses $\wedge$ for "or" and no symbol for "and." A short table of notations would be helpful to the neophyte, for not all authors have the thoughtfulness to describe their notation. The bibliography is not extensive.

The printing is by photographic offset process from typed copy, and there was a considerable amount of smearing and a number of ghost images in the review copy. However, these defects did not make reading seriously difficult.

This pamphlet should be a handy introduction to Boolean algebra for many users and a useful adjunct to the texts for several courses which might be offered in colleges.

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9 [K].—B. M. BENNETT & P. HSU, *Significance Tests in a 2 × 2 Contingency Table: Extension of Finney-Latscha Tables,* July 1960. Deposited in UMT File.

In testing the significance of deviations from proportionality in a 2 × 2 con-