

In introducing linear multiple regression (p. 164) it should be pointed out that the form of the equation assumes the relationship between the variables to be additive. The discussion given might lead the reader to believe that the linear equation includes all cases.

Statisticians interested in factor analysis will question the recommendation that not more than ten, usually five, variables be used in a study.

To obtain such quantities as $\sum XY$ and $\sum X^2$ it should be mentioned that the extensions as made in the text are not needed. An explanation of the use of a calculating machine to shorten the work might well be given in the text at an early point.

One rather general criticism of the book should be made. There is throughout the tendency to over-correct calculated constants and to over-refine tests of significance. More care should be taken to explain the fact that experimental data frequently do not justify the use of many of these refinements. To an untrained reader they may imply an accuracy of analysis not actually present. In some cases the significance tests suggested are actually incorrect, as for example the use of the standard error of the coefficient of multiple correlation.

In spite of the above criticisms the reviewer considers this book still to be the best in its field.

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Finite dimensional vector spaces. By Paul R. Halmos. (Annals of Mathematics Studies, no. 7.) Princeton University Press, 1942. 5+196 pp.

In this book the author presents the topics covered usually in an introductory course in algebra (matrices, linear equations, linear transformations, and so on) from the point of view of a modern analyst interested in general vector spaces.

The ever-growing interest in Hilbert and more general linear spaces makes the appearance of the book very timely, especially since it furnishes an excellent introduction to the subject certainly within the grasp of a first-year graduate student or even a good senior or junior.

The topics are treated in such a manner as to make future generalizations look both natural and suggestive. This sometimes is done at the expense of the shortness of exposition. Some theorems, as the author himself confesses, could be proved in fewer lines. He prefers, however, longer proofs that admit a generalization to shorter ones that do not.

The reviewer finds himself in complete agreement with this method