met with in statistics. Then come sampling theory, statistical estimation (non-parametric and parametric), the testing of hypotheses, sequential analysis and decision theory, time series, and multivariate analysis, all in considerable detail. The chapters in the old edition on normal regression theory and analysis of variance are now included in a chapter on linear statistical estimation which precedes the general treatment of estimation theory. The sections on non-parametric inference and order statistics are new in this edition.

There are over four hundred problems, almost entirely theoretical, at the ends of the various chapters. Some of these introduce new and interesting results for which there was not room in the text itself. A fairly elaborate list of references, arranged alphabetically under authors, serves also as an author index, since the pages of the text on which the authors are cited are given after each reference.

A few misprints, mostly trivial have been noted. On page 78, line 12, $\sin x_1$ should be $\cos x_1$. The definition of correlation ratio on page 86 does not agree with the usual one (for instance, in Kendall and Buckland' s Dictionary of Statistical Terms) and makes the ratio equal to unity for independent variates. The expression for the estimator of σ_B^2 on page 321 appears to be incorrect. However, a few minor flaws do not seriously detract from the great merits of a book which will be welcomed enthusiastically in every graduate school of mathematical statistics in the English-speaking world.

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Les Méthodes en Génétique Générale et en Génétique Humaine par Roger Huron et Jacques Ruffié. Masson et Cie, Editeurs, Paris, 1959. 556 pages.

This work is a masterpiece, both with respect to its contents and its manner of presentation. By emphasising in the brief and clear "Introduction" that heredity is only one of the factors (achieving its effect in interaction with the environment) effectively determining a living being's characteristics, it forestalls the current ill-applied criticisms which slander geneticists and their mathematical and biological collaborators with the accusation of "fatalism". The main body of the book lives up splendidly to the high expectations the "Preface" and the "Introduction" keyed up in the reviewer. Clear and concise summaries of the elementary algebraic and combinatorial theorems (underlying classical or Mendelian genetics) must be a delight to any mathematician or mathematically minded biologist. Even more pleasure may be derived from the manner in which these

fundamental algebraic facts are realized in living nature. Although it is widely accepted that much (if not all) of science consists of the construction and demonstration of isomorphism-relationships between mathematics (as created by the human mind) and the structure of the external world (as interpreted by the human senses) this acceptance tends to remain lipservice with respect to algebra and is usually operative only in the more difficult higher analysis as used in physics, aerodynamics etc, It is satisfying to see that elementary algebra also has its realisations, not merely in artificial line-diagrams and urn- and marble schemes, but also in living beings. The exposition is equally clear in their mathematical principles and in their applications to practical problems in plant - and animal breeding. The only additional points which the reviewer would like to see discussed in these chapters are the applications of more refined combinatorial formulae to the enumeration of genotypes, results obtained by Fisher and Bennet. The more advanced chapters of the book - dealing with passages from generation to generation - give a sound outline of the foundations of matrix algebra, with theorems on the relative magnitude of the latent roots. It could be desired, however, that beyond this basic formal treatment some elaboration be given to the use of stochastic-process theory (as initiated by Fisher, and more recently highly refined by M. Kimura and P. A. P. Moran) in the description of the composition of successive generations. The importance of the final chapters, on human genetics, is foreshaded early in the book where the ethical impossibility of appropriately designed mating experiments and the additional ditficulty inherent in the long generation times is clearly indicated. The refinements of statistical methods (achieved mainly by C. A. B. Smith and by J. B. S. Haldane) are brilliantly outlined in the final chapters. The authors, with praise-worthy self-restraint, keep to the scope of the book as indicated by the title ("Methodes") and refrain from elaborating the clinico-medical and the politico-sociological aspects of the findings these "methods" render available. The reader whose appetite is whetted for such material can, if he wishes, turn to the works of L. Hogben, C. D. Darlington, and L. S. Penrose.

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Finite-Difference Methods for Partial Differential Equations, by George E. Forsythe and Wolfgang R. Wasow. Wiley and Sons, Inc. New York, 1960. 444 + x pages. $11.50.

This book, with more than 400 pages of text and a 16 page bibliography, is a most prolific source of information on numerical methods for problems in partial differential equations. The material in the book is elementary, presupposing only advanced calculus and