

RMT 44; v. 19, 1965, pp. 151–152, RMT 5, pp. 690–691, RMT 120; and v. 21, 1967, p. 264, RMT 24).

The seventh and eighth parts list exact values of ${}^{\nu}S_n^k$ for $n = 39$ and 40 , respectively; in each case for $k = 1(1)n - 1$ and $\nu = 1(1)n - 2$. For $n = 40$, $k = 37$, $\nu = 1$, the tabular entry consists of 48 digits.

The integer ${}^{\nu}S_n^k$ is defined as the coefficient of t^{n-k} in the product

$$t(t-1)(t-2)\cdots(t-\nu+1)(t-\nu-1)\cdots(t-n+1).$$

Exact values for $n = 3(1)40$ are contained in this set of tables as a whole.

A. FLETCHER

Department of Applied Mathematics
University of Liverpool
Liverpool 3, England

72[8].—NORMAN DRAPER & HARRY SMITH, *Applied Regression Analysis*, John Wiley & Sons, New York, 1966, ix + 407 pp., 24 cm. Price \$11.75.

This text provides a standard, basic course in multiple linear regression. Topics of fundamental importance to regression analysis practitioners are included, beginning with fitting a straight line by least squares; then generalizing, by means of matrix notation, to multiple regression; and ending with a chapter devoted to nonlinear estimation.

Application of multiple regression to analysis of variance and covariance are considered. The emphasis is on practical applications. Many examples are included, and there are exercises at the end of nearly all the chapters, for which answers are provided. Examples of computer print-outs are also provided.

The book includes some material that is not generally available, for instance, a chapter on the examination of residuals. However, more consideration might have been given to the selection of an appropriate size sample and the related topic, power; the regression treatment of the two-way classification with an unequal number of observations in the cells (the nonorthogonal case); and canonical correlation (a generalization of multiple correlation). In the chapter on selecting the "best" regression equation, the Wherry "shrinkage" formula might have been considered. While it has some limitations, it seems more appropriate than the step-wise regression method for determining the number of predictors in the multiple-regression equation.

The text is authoritative and impressive. It should have an impact on the teaching of regression in universities. To readers who are familiar with multiple regression, it will serve as a very useful handbook.

NATHAN JASPEN

New York University
School of Education
New York, New York 10012

73[8, 13.35].—R. CRUON, Editor, *Queuing Theory: Recent Developments and Applications*, American Elsevier Publishing Co., New York, 1967, xv + 224 pp., 23 cm. Price \$13.50.

The title of the book suggests that the central theme of the conference in which these papers were presented was Queueing Theory and its Applications. However, a glance at the topics discussed discloses that the central theme has been stretched to include a wide variety of related topics.

The papers have been grouped into six sections, each containing papers presented at a particular session. These are: *Point Processes*, with papers "Processus Ponctuels dans les Modèles de Files d'Attente et de Stockage" by M. Girault, "A Self-Service System with Scheduled Arrivals" by A. Mercer and J. B. Parker, and "The Application of Stochastic Processes to Countdown Analysis" by David S. Stoller; *Mathematical Methods of Queueing Theory*, with papers "Pollaczek Method in Queueing Theory" by R. Syski, "Utilisation de la Théorie des Processus Semi-Markoviens dans l'Étude de Problèmes de Files d'Attente" by J. P. Lambotte and J. Teghem, and "The Custodian's Problem" by L. Kosten; *Nearly Saturated Queues and Transient Behavior*, with papers "Approximations for Queues in Heavy Traffic" by J. F. C. Kingman, "The Advantage of Precedence Operation with Overloaded or Fully Loaded Circuits" by E. P. G. Wright, and "Numerical Methods of Determining the Transient Behavior of Queues with Variable Arrival Rate" by E. L. Leese; *Inventories and Maintenance*, with papers "Files d'Attente et Stocks" by R. Debry and J. Teghem, and "A Mathematical Study of Unscheduled Open Hearth Furnace Repairs" by R. R. P. Jackson; *Statistical Problems*, with papers "Inference Statistique dans les Processus de Markov-Applications dans les Problèmes de Files d'Attente" by Simone Huyberegts, "Estimation of the Dispersion Parameter of an (A, B) Process" by L. J. Govier and T. Lewis, and "Spectral Analysis of Time Series Generated by Simulation Models" by G. S. Fishman and P. J. Kiviat; *Case Histories and Simulation* with papers "Checking the Simulation of a Queueing Type Situation" by B. W. Conolly, "A Study of a Multi-Channel Queueing Process in a Communications Terminal" by G. Hatzikostandis and S. Howe, "Arrivée à un bac d'un Traffic Composite" by B. Roy and J. Auberger, "Files d'Attente et Processus Markoviens à une Intersection de Traffic Comparison de Divers Modes de Contrôle" by P. Passau, and "Comparison Between Analogic and Digital Simulation of Telephone Gradings" by I. Capetti.

The book also includes a paper "The Application of Queueing Theory in Operations Research" by Philip Morse as Introduction, a paper "Ordering Disorderly Queues" by Thomas L. Saaty as Conclusion, and Final Remarks by R. Fortet.

Some of these papers have appeared before in journals in one form or the other (for instance see E. L. Leese and D. W. Boyd "Numerical Methods of Determining the Transient Behavior of Queues with Variable Arrival Rates," *J. Canad. Operations Res. Soc.*, v. 4, 1966, pp. 1-13). In the reviewer's opinion the major contribution of the book seems to lie in exposing to the English speaking world some of the outstanding work being carried out in France and Belgium.

U. NARAYAN BHAT

Western Reserve University
Department of Operations Research
Cleveland, Ohio 44106

74[9].—ALBERT H. BEILER, *Consecutive Hypotenuses of Pythagorean Triangles*, ms. of 11 typewritten pp. (including table) deposited in the UMT file.