case, in finite samples, the essentially unique optimum unbiased estimating equation. The treatment using asymptotics tends to suggest to students that maximum likelikhood estimation is superior to other methods only in large samples.

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PLAIN ANSWERS TO COMPLEX QUESTIONS, 2nd edition. R. Christensen. New York: Springer-Verlag, 1996, pp. xvii + 452, US$54.95.

Contents:

Readership: Mathematically prepared readers

This revision of the original 1987 book [Short Book Reviews, Vol. 8, p.3] retains its fairly mathematical character and has gone from 380 to 452 pages, a nineteen percent increase. Log-linear models, the former Chapter 15, and the former "Appendix F: Approximate methods for unbalanced ANOVAs" are gone, and there is more on "ANOVA-type" models and a new Appendix F. The writing style is inviting and the text often expresses the author's feelings in friendly and affable ways. The computing aspects of regression are deemphasized and the text leans more towards well-prepared statistics students. If you liked the first edition, I did, you will be pleased by the second. There are one hundred and twenty-six references.

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THE STATISTICAL THEORY OF SHAPE. C.G. Small. New York: Springer-Verlag, 1996, pp. x + 227, US$ 49.95.

Contents:

Readership: Statisticians, probabilists and experimental scientists with some background in differential geometry

The 'shape' of an object is what remains after all information regarding size, location and orientation is discarded. For example, all squares share the same shape. In the early 1980s, a formal theory of shape was developed, albeit from different perspectives, by D.G. Kendall and F. Bookstein. More recently, the subject has found applications in areas as diverse as archaeology, biology, medicine and vision. Although some excellent reviews exist, a textbook solely devoted to shape analysis seems to be missing. The present monograph will be a useful introduction for anyone interested in shape, as well as a helpful source of reference for researchers in the field.

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STATISTICAL METHODS: A GEOMETRIC PRIMER. D.J. Saville and G.R. Wood. New York: Springer-Verlag, 1996, pp. xi + 268, US$39.95.

Contents:

Readership: Undergraduate statistics students and teachers

At the heart of the linear model is the Pythagorean triangle, which decomposes the data into a component corresponding to a fitted regression and a component corresponding to error. Despite the simplicity of this idea, we all know that students have a hard time understanding the geometric interpretation of basic linear methods. However, the combined tools of projection and orthogonal decomposition are essential ingredients in an undergraduate understanding of statistics. Much of our discipline is concerned with the extraction of signal from noise, where projection is the tool for the job. However, the task of explaining the geometry of the linear model is not easy. Realistic sets of data live in high dimensions that cannot be graphed on a page. Nevertheless, the authors of this book have done an excellent job of explaining clearly what needs to be said. I would particularly recommend it as a supplementary text in an undergraduate course. Among the mass-market statistics cookbooks, it makes a refreshing change.

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UNBIASED ESTIMATORS AND THEIR APPLICATIONS, VOLUME 2: MULTIVARIATE CASE. V.G. Vionov and M.S. Nikulin. Dordrecht: Kluwer, 1996, pp. ix + 262, Dfl.195.00/US$135.00/£88.00.

Contents:

Readership: Researchers in multivariate theory

Those working on estimation problems involving multivariate distributions will find this book a useful addition to their library. It follows on from Unbiased Estimators and Their Applications. Volume 1: Univariate