

**ZMATH 2011e.00712**

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**Probability and statistics with R.**

Boca Raton, FL: CRC Press (ISBN 978-1-58488-891-8/hbk). xxvi, 700 p. (2008).

The book introduces R as a teaching statistical package. It presents real-world examples of how R can be used to solve problems in every topic covered including general probability in both the univariate and multivariate cases, sampling distributions and point estimation, confidence intervals, hypothesis testing, experimental design, and regression. Both traditional methods to solve problems are covered as well as many nonparametric techniques. The figures used to explain difficult topics are very detailed. The derivations of equations are worked and thoroughly. Any reader interested in applying the R language to the world of statistics will benefit from this book. The most part of the text has been used in undergraduate courses at the Public University of Navarre. It has been used to each engineering and economics majors. Some of the material has been also used to teach graduate students studying agriculture, biology, engineering and medicine. The book contains abundant problems, and a solution manual is available from Taylor&Francis. The monograph will be useful to teachers, students, and practitioners of statistics. It will be helpful as a reference work due to the extensive treatment on data analysis. Contents: Ch. 1. A brief introduction to S. Ch. 2. Exploring data. Ch. 3. General probability and random variables. Ch. 4. Univariate probability distributions. Ch. 5. Multivariate probability distributions. Ch. 6. Sampling and sampling distribution. Ch. 7. Point estimation. Ch. 8. Confidence intervals. Ch. 9. Hypothesis testing. Ch. 10. Nonparametric methods. Ch. 11. Experimental design. Ch. 12. Regression. *Oleksandr Kukush (Kyiv)*

*Classification:* K15 R25

*Keywords:* R package; data analysis; sampling; estimation; hypothesis testing; experimental design; regression