

1. Record Nr.	UNINA9910973614803321
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Titolo	Examples and problems in mathematical statistics // Shelemyahu Zacks
Pubbl/distr/stampa	Hoboken, New Jersey : , : Wiley, , 2014
ISBN	9781118605837 1118605837 9781118606001 1118606000
Edizione	[1st ed.]
Descrizione fisica	1 online resource (654 pages)
Collana	Wiley series in probability and statistics
Classificazione	417 519.5
Disciplina	519.5
Soggetti	Mathematical statistics Statistics
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Includes bibliographical references (p. 601-611) and indexes
Nota di bibliografia	Includes bibliographical references and index.
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Provides the necessary skills to solve problems in mathematical statistics through theory, concrete examples, and exercises With a clear and detailed approach to the fundamentals of statistical theory, Examples and Problems in Mathematical Statistics uniquely bridges the gap between theory and application and presents numerous problem-solving examples that illustrate the related notations and proven results. Written by an established authority in probability and mathematical statistics, each chapter begins with a theoretical presentation to introduce both the topic and the important results in an effort to aid in overall comprehension. Examples are then provided, followed by problems, and finally, solutions to some of the earlier problems. In addition, Examples and Problems in Mathematical Statistics features: Over 160 practical and interesting real-world examples from a variety of fields including engineering, mathematics, and statistics to help readers become proficient in theoretical problem solving More than 430 unique exercises with select solutions Key statistical inference topics, such as probability theory, statistical distributions, sufficient statistics, information in samples, testing statistical hypotheses, statistical estimation, confidence and tolerance intervals, large sample theory, and Bayesian analysis Recommended for graduate-level courses in probability and statistical inference, Examples and Problems in Mathematical Statistics is also an ideal reference for applied statisticians and researchers.
