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Titolo	Formulas useful for linear regression analysis and related matrix theory : it's only formulas but we like them // Simo Puntanen, George P.H. Styan, Jarkko Isotalo
Pubbl/distr/stampa	New York, : Springer, 2013
ISBN	3-642-32931-4
Edizione	[1st ed. 2013.]
Descrizione fisica	1 online resource (137 p.)
Collana	Springer briefs in statistics
Altri autori (Persone)	StyanGeorge Peter Hansbenno IsotaloJarkko
Disciplina	510.212
Soggetti	Linear systems - Mathematical models Mathematics - Formulae
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Includes index.
Nota di contenuto	The Model Matrix -- Fitted Values and Residuals -- Regression Coefficients -- Alternative Estimators -- Decompositions of Sums of Squares -- Partial Correlations -- Distributions -- Testing Hypotheses -- Diagnostics -- BLUE: Some Helpful Identities -- Estimability -- Best Linear Unbiased Estimator -- The Watson Efficiency -- Linear Sufficiency and Admissibility -- Best Linear Unbiased Predictor -- Mixed Model -- Multivariate Linear Model -- Inverse of a Partitioned Matrix -- Generalized Inverses -- Projectors -- Eigenvalues -- Discriminant Analysis -- Factor Analysis -- Canonical Correlations -- Matrix Decompositions -- Principal Component Analysis -- Löwner Ordering -- Rank Rules -- Inequalities -- Kronecker Product -- Matrix Derivatives.
Sommario/riassunto	This is an unusual book because it contains a great deal of formulas. Hence it is a blend of monograph, textbook, and handbook. It is intended for students and researchers who need quick access to useful formulas appearing in the linear regression model and related matrix theory. This is not a regular textbook - this is supporting material for courses given in linear statistical models. Such courses are extremely common at universities with quantitative statistical analysis programs.