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6.3 Hypothesis Test and Confidence Interval for (1) 6.4 Coefficient of Determination; 7 Multiple Regression: Estimation; 7.1 Introduction; 7.2 The Model; 7.3 Estimation of (0) and (2) ; 7.3.1 Least-Squares Estimator for (0) and (2) ; 7.3.2 Properties of the Least-Squares Estimator for (0) and (2) ; 7.3.3 An Estimator for (1) ; 7.4 Geometry of Least-Squares; 7.4.1 Parameter Space, Data Space, and Prediction Space; 7.4.2 Geometric Interpretation of the Multiple Linear Regression Model; 7.5 The Model in Centered Form; 7.6 Normal Model; 7.6.1 Assumptions; 7.6.2 Maximum Likelihood Estimators for (0) and (2)
7.6.3 Properties of (0) and (2)

Sommario/riassunto

The essential introduction to the theory and application of linear models-now in a valuable new edition Since most advanced statistical tools are generalizations of the linear model, it is necessary to first master the linear model in order to move forward to more advanced concepts. The linear model remains the main tool of the applied statistician and is central to the training of any statistician regardless of whether the focus is applied or theoretical. This completely revised and updated new edition successfully develops the basic theory of linear models for regression, analysis of vari