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b. Observations; c. Estimation; d. Example; e. The general case of k x-variables; f. Example (continued); g. Intercept and no-intercept models; h. Example (continued); 2. Deviations from means; 3. Four methods of estimation; a. Ordinary least squares; b. Generalized least squares; c. Maximum likelihood; d. The best linear unbiased estimator (b.l.u.e.); 4. Consequences of estimation; a. Unbiasedness; b. Variances; c. Estimating $E(y)$; d. Residual error sum of squares; e. Estimating the residual error variance; f. Partitioning the total sum of squares; g. Multiple correlation; h. Example (continued); 5. Distributional properties; a. y is normal; b. b is normal; c. b and 2 are independent; d. $SSE/2$ has a 2 -distribution; e. Non-central 2 's; f. F-distributions; g. Analyses of variance; h. Pure error; i. Tests of hypotheses; j. Example (continued); k. Confidence intervals; l. Example (continued); 6. The general linear hypothesis; a. Testing linear hypotheses; b. Estimation under the null hypothesis; c. Four common hypotheses; (i) $H: b = 0$; (ii) $H: b = b_0$; (iii) $H: b = m$; (iv) $H: b_0 = 0$; d. Reduced models; (i) $K'b = m$; (ii) $K'b = 0$; (iii) $b_0 = 0$; 7. Related topics; a. The likelihood ratio test; b. Type I and II errors; c. The power of a test; d. Examining residuals; 8. Summary of regression calculations; 9. Exercises; 4. Introducing Linear Models: Regression on Dummy Variables; 1. Regression on allocated codes; a. Allocated codes; b. Difficulties and criticism; c. Grouped variables; d. Unbalanced data; 2. Regression on dummy (0, 1) variables; a. Factors and levels; b. The regression; 3. Describing linear models; a. A 1-way classification; b. A 2-way classification; c. A 3-way classification; d. Main effects and interactions; (i) Main effects; (ii) Interactions

Sommario/riassunto

This 1971 classic on linear models is once again available--as a Wiley Classics Library Edition. It features material that can be understood by any statistician who understands matrix algebra and basic statistical methods.