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Problems; Chapter 6. Comparing Two Populations; 6.1 Paired Samples; 6.2 Independent Samples
6.3 Comparing Two Binomial Populations 6.4 Chapter Problems; Chapter 7. One-Factor Multi-Sample Experiments; 7.1 Basic Inference; 7.2 The Analysis of Means; 7.3 ANOM with Unequal Sample Sizes; 7.4 ANOM for Proportions; 7.5 The Analysis of Variance; 7.6 The Equal Variances Assumption; 7.7 Sample Sizes; 7.8 Chapter Problems; Chapter 8. Experiments with Two Factors; 8.1 Interaction; 8.2 More Than One Observation Per Cell; 8.3 Only One Observation per Cell; 8.4 Blocking to Reduce Variability; 8.5 Chapter Problems; Chapter 9. Multi-Factor Experiments; 9.1 ANOVA for Multi-Factor Experiments
9.2 2k Factorial Designs 9.3 Fractional Factorial Designs; 9.4 Chapter Problems; Chapter 10. Inference for Regression Models; 10.1 Inference for a Regression Line; 10.2 Inference for Other Regression Models; 10.3 Chapter Problems; Chapter 11. Response Surface Methods; 11.1 First-Order Designs; 11.2 Second-Order Designs; 11.3 Chapter Problems; Chapter 12. Appendices; 12.1 Appendix A - Descriptions of Data Sets; 12.2 Appendix B - Tables; 12.3 Appendix C - Figures; 12.4 Appendix D - Sample Projects; Chapter 13. References; Index

Sommario/riassunto

The Accreditation Board for Engineering and Technology (ABET) introduced a criterion starting with their 1992-1993 site visits that ""Students must demonstrate a knowledge of the application of statistics to engineering problems."" Since most engineering curricula are filled with requirements in their own discipline, they generally do not have time for a traditional two semesters of probability and statistics. Attempts to condense that material into a single semester often results in so much time being spent on probability that the statistics useful for designing and analyzing engineer