

# Contents

Preface	v
1. Opening Shots	1
<i>Bird Watching — The Place of Statistics in Research — Answering Questions vs Hypothesis Testing — Research Errors — Pilot Experiments — Summary</i>	
2. The Search for Indications	7
<i>Multiple-Analysis — Empirical Distributions — Measures of Central Tendency — Measures of Variability — “Spotty” Data — Reviewing the Bidding — Problems</i>	
3. Steps to Inference: I. Numbers	26
<i>A Single Mean — The Means of Two Independent Groups — The Means of <math>k</math> Independent Groups — Multiple Comparisons of Means and Variances from <math>k</math> Independent Groups — The Means of Two Matched Groups — The Means of <math>k</math> Matched Groups — Multiple Comparison of Means from <math>k</math> Matched Groups — Three More Complex Experimental Designs — A Quick Review — Problems</i>	
4. Steps to Inference: II. Ranks and Signs	105
<i>A Location Test for Two Independent Groups — A Location Test for <math>k</math> Independent Groups — Multiple-Compari-</i>	

*son Location Tests for k Independent Groups — A Location Test for Two Matched Groups — A Location Test for k Matched Groups — Multiple-Comparison Location Tests for k Matched Groups — A Quasi-Summary and a Few Words-To-Live-By — Problems*

5. Steps to Inference: III. Classes	123
<i>Class Frequencies of Two Independent Groups — Class Frequencies of k Independent Groups — Partitions with k Independent Groups — Class Frequencies of Two Matched Groups — Class Frequencies of k Matched Groups — Multiple Comparisons of Class Frequencies with k Matched Groups — A Mini-Summary and More Words-To-Live-By — Problems</i>	
6. Steps to Inference: IV. Relationships	140
<i>The Case of Harvey, Traffic Engineer — Linear Relationships: Numbers — Curvilinear Relationships: Numbers — Monotonic Relationships: Ranks — A Nonsummary — Problems</i>	
7. Closing Shots	164
<i>Testing Statistical Hypotheses vs. Confidence Intervals — Multiple-Analysis Revisited — Some Tactics for Research and Data Analysis — Final Remarks</i>	
Answers to the Even-Numbered Problems	177
References	181
Appendix	187
Index	249