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2.4.5 Samples for Case/Control StudiesProblems; References; 3 Collecting and Entering Data; 3.1 Initial Steps; 3.1.1 Decide What Data You Need; 3.1.2 Deciding How to Collect the Data; 3.1.3 Testing the Collection Process; 3.2 Data Entry; 3.3 Screening the Data; 3.4 Code Book; Problems; References; 4 Frequency Tables and Their Graphs; 4.1 Numerical Methods of Organizing Data; 4.1.1 An Ordered Array; 4.1.2 Stem and Leaf Tables; 4.1.3 The Frequency Table; 4.1.4 Relative Frequency Tables; 4.2 Graphs; 4.2.1 The Histogram: Equal Class Intervals; 4.2.2 The Histogram: Unequal Class Intervals
4.2.3 Areas Under the Histogram4.2.4 The Frequency Polygon; 4.2.5 Histograms with Small Class Intervals; 4.2.6 Distribution Curves; Problems; References; 5 Measures of Location and Variability; 5.1 Measures of Location; 5.1.1 The Arithmetic Mean; 5.1.2 The Median; 5.1.3 Other Measures of Location; 5.2 Measures of Variability; 5.2.1 The Variance and the Standard Deviation; 5.2.2 Other Measures of Variability; 5.3 Sampling Properties of the Mean and Variance; 5.4 Considerations in Selecting Appropriate Statistics; 5.4.1 Relating Statistics and Study Objectives
5.4.2 Relating Statistics and Data Quality5.4.3 Relating Statistics to the Type of Data; 5.5 A Common Graphical Method for Displaying Statistics; Problems; References; 6 The Normal Distribution; 6.1 Properties of the Normal Distribution; 6.2 Areas Under the Normal Curve; 6.2.1 Computing the Area Under a Normal Curve; 6.2.2 Linear Interpolation; 6.2.3 Interpreting Areas as Probabilities; 6.3 Importance of the Normal Distribution; 6.4 Examining Data for Normality; 6.4.1 Using Histograms and Box Plots; 6.4.2 Using Normal Probability Plots or Quantile-Quantile Plots; 6.5 Transformations
6.5.1 Finding a Suitable Transformation

Sommario/riassunto

New Edition of a Classic Guide to Statistical Applications in the Biomedical Sciences In the last decade, there have been significant changes in the way statistics is incorporated into biostatistical, medical, and public health research. Addressing the need for a modernized treatment of these statistical applications, Basic Statistics, Fourth Edition presents relevant, up-to-date coverage of research methodology using careful explanations of basic statistics and how they are used to address practical problems that arise in the medical and public health settings. Through concise and ea