

TABLE OF CONTENTS

Front Matter

- TitlePage
- InfoPage

Licensing

Back Matter

- Index

1: Sampling and Data

- 1.1: Introduction
- 1.2: Definitions of Statistics, Probability, and Key Terms
- 1.3: Data, Sampling, and Variation in Data and Sampling
- 1.4: Frequency, Frequency Tables, and Levels of Measurement
- 1.5: Experimental Design and Ethics
- 1.6: Sampling and Data (Exercises)

2: Descriptive Statistics

- 2.1: Prelude to Descriptive Statistics
- 2.2: Histograms, Frequency Polygons, and Time Series Graphs
- 2.3: Measures of the Location of the Data
 - Measures of the Location of the Data (Exercises)
- 2.4: Measures of the Center of the Data
- 2.5: Skewness and the Mean, Median, and Mode
- 2.6: Measures of the Spread of the Data
- 2.7: Descriptive Statistics (Exercises)

3: The Normal Distribution

- 3.1: Prelude to The Normal Distribution
- 3.2: The Standard Normal Distribution
 - The Standard Normal Distribution (Exercises)
- 3.3: Using the Normal Distribution
- 3.4: The Normal Distribution (Exercises)

4: The Central Limit Theorem

- 4.1: Prelude to the Central Limit Theorem
- 4.2: The Central Limit Theorem for Sample Means (Averages)
 - The Central Limit Theorem for Sample Means (Exercises)
- 4.3: Using the Central Limit Theorem
 - Using the Central Limit Theorem (Exercises)

5: Confidence Intervals

- 5.1: Prelude to Confidence Intervals
- 5.2: A Single Population Mean using the Normal Distribution
 - A Single Population Mean using the Normal Distribution (Exercises)
- 5.3: A Single Population Mean using the Student t-Distribution
- 5.4: A Population Proportion
- 5.5: Confidence Intervals (Exercises)
- 5.6: Confidence Intervals (Summary)

6: Hypothesis Testing with One Sample

- 6.1: Prelude to Hypothesis Testing
- 6.2: Null and Alternative Hypotheses
 - Null and Alternative Hypotheses (Exercises)
- 6.3: Outcomes and the Type I and Type II Errors
 - Outcomes and the Type I and Type II Errors (Exercises)
- 6.4: Distribution Needed for Hypothesis Testing
 - Distribution Needed for Hypothesis Testing (Exercises)
- 6.5: Rare Events, the Sample, Decision and Conclusion
 - Rare Events, the Sample, Decision and Conclusion (Exercises)
- 6.6: Additional Information and Full Hypothesis Test Examples
- 6.7: Hypothesis Testing with One Sample (Exercises)

7: Hypothesis Testing with Two Samples

- 7.1: Prelude to Hypothesis Testing with Two Samples
- 7.2: Two Population Means with Unknown Standard Deviations
- 7.3: Matched or Paired Samples
- 7.4: Hypothesis Testing with Two Samples (Exercises)

8: The Chi-Square Distribution

- 8.1: Prelude to The Chi-Square Distribution
- 8.2: Facts About the Chi-Square Distribution
- 8.3: Test of Independence
- 8.4: Test for Homogeneity
- 8.5: Comparison of the Chi-Square Tests
- 8.6: The Chi-Square Distribution (Exercises)

9: Linear Regression and Correlation

- 9.1: Prelude to Linear Regression and Correlation
- 9.2: Linear Equations
 - Linear Equations (Exercises)
- 9.3: Scatter Plots
 - Scatter Plots (Exercises)
- 9.4: The Regression Equation
 - The Regression Equation (Exercise)
- 9.5: Testing the Significance of the Correlation Coefficient
 - Testing the Significance of the Correlation Coefficient (Exercises)

- [9.6: Prediction](#)
 - [Prediction \(Exercises\)](#)
- [9.7: Outliers](#)
 - [Outliers \(Exercises\)](#)
- [9.8: Linear Regression and Correlation \(Exercises\)](#)

10: F Distribution and One-Way ANOVA

- [10.1: Prelude to F Distribution and One-Way ANOVA](#)
- [10.2: One-Way ANOVA](#)
- [10.3: The F Distribution and the F-Ratio](#)
- [10.4: Facts About the F Distribution](#)
- [10.5: Test of Two Variances](#)
- [10.6: F Distribution and One-Way ANOVA \(Exercises\)](#)

[Index](#)

[Glossary](#)

[Detailed Licensing](#)