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    - Identify the null and alternative hypotheses for a hypothesis test to test the difference between two population proportions (5)
    - Confirm the conditions are satisfied to use a z-test for the hypothesis test to test the difference between two population proportions (5)
- 10.4.2 Calculate the Test Statistic - Independent Samples
    - Compute the value of the test statistic (z-value) for a hypothesis test to test the difference between two population proportions (26)
- 10.4.3 Two population hypothesis test for proportions (Independent Samples) - Critical Value/Rejection Region Approach
    - Determine the critical value(s) for a hypothesis test to test the difference between two population proportions in order to define rejection region(s) (5)
    - Make a conclusion and interpret the results for a hypothesis test to test the difference between two population proportions using the Critical Value/Rejection Region Approach (5)
- 10.4.4 Complete the steps of a Two population hypothesis test for proportions (Independent Samples) - Critical Value/Rejection Region Approach
    - Complete the steps of a Two population hypothesis test for proportions (Independent Samples) - Critical Value/Rejection Region Approach (5, 5, 26)
- 10.4.5 Two population hypothesis test for proportions (Independent Samples) - P-Value Approach
    - Determine the p-value for a hypothesis test to test the difference between two population proportions (5)
    - Make a conclusion and interpret the results for a hypothesis test to test the difference between two population proportions using the P-Value Approach (5)
- 10.4.6 Complete the steps of a Two population hypothesis test for proportions (Independent Samples) - P-Value Approach
    - Complete the steps of a Two population hypothesis test for proportions (Independent Samples) - P-Value Approach (5, 5, 5)
- 10.4.6-Calculator: Perform and Interpret a Two-Proportion Hypothesis Test with Technology
    - Perform and Interpret a Two-Proportion Hypothesis Test with Technology – Calculator

- 10.4.6-Excel: Perform and Interpret a Two-Proportion Hypothesis Test with Technology – Excel
  - Perform and Interpret a Two-Proportion Hypothesis Test with Technology - Excel

Chapter 11: Chi-Square Distributions

11.1 Introduction to the Chi-Square Distribution

- 11.1.1 Introduction to Chi-Square Distribution
  - Understand the properties of the chi-square distribution (5)
  - Distinguish between use cases of the chi-square tests (5)

11.2 Chi-Square Tests

- 11.2.1 Chi-Square Goodness-of-Fit Test
  - Compute the value of the test statistic using the expected frequencies for a chi-square goodness-of-fit test (26)
  - Conduct and interpret a chi-square goodness-of-fit test (5, 5, 5, 26)
- 11.2.2 Chi-Square Independence Test
  - Compute the value of the test statistic using the expected frequencies for a chi-square independence test (5, 5)
  - Conduct and interpret a test of independence with the chi-square distribution (5, 5, 5, 5)
- 11.2.3 Chi-Square Homogeneity Test
  - Compute the value of the test statistic using the expected frequencies for a chi-square homogeneity test (5, 5)
  - Conduct and interpret a test for homogeneity with the chi-square distribution (5, 5, 5, 5)

Chapter 12 - Linear Regression

12.1 Linear Regression Equations

- 12.1.1 Linear Regression Equations and Application
  - Understand properties of linear equations (40)
  - Understand the relationship between scatter plots and tables and determine patterns (5, 5, 5, 5)
  - Find the linear regression equation given a list of data points (5)
- 12.1.2 Uses of Linear Regression
  - Find and interpret the correlation coefficient (5)
  - Identifying the line of best fit (Least Squares Regression) (5, 5, 5)
  - Make predictions using a line of best fit (5, 5)
- 12.1.3 Outliers and Prediction Errors
  - Find outliers in a data set (5)
  - Determine the prediction errors for data values and trend lines (5, 26)
- 12.1.4 Correlation and Causation
  - Interpret the slope and y-intercept of the least squares regression line (5)
  - Understand the difference between correlation and causation (5)
- 12.1.5 Coefficient of Determination
  - Compute and interpret the sums of squares representing total, explained, and unexplained variation among y-values (5)

- Compute and interpret the coefficient of determination (5)

12.2 Linear Regression with Technology

- 12.2.1-Calculator: Performing Linear Regressions with Technology
  - Calculate the correlation coefficient using Technology - Calculator
  - Determine the best fit linear regression equation using Technology - Calculator
- 12.2.1-Excel: Performing Linear Regressions with Technology
  - Calculate the correlation coefficient using Technology - Excel
  - Determine the best fit linear regression equation using Technology - Excel

12.3 Recognizing Multivariate Relationships

- 12.3.1 Multivariate Relationships
  - Identify applications where multiple regression can be performed (5)
  - Define the format for a multiple regression equation (5)
  - Make predictions using the multiple regression equation (5)

12.4 Multivariate Relationships with Technology

- 12.4.1-Calculator: Applying technology to determine the multiple regression equation with technology
  - Determine the multiple regression equation using Technology - Calculator
- 12.4.1-Excel: Applying technology to determine the multiple regression equation with technology
  - Determine the multiple regression equation using Technology - Excel

Chapter 13: Introduction to ANOVA tests

13.1 Setting up the one-way ANOVA test

- 13.1.1 Setting up the one-way ANOVA test
  - Determine appropriate situations for a one-way ANOVA test and identify the null and alternative hypotheses (5, 5)
  - Determine the degrees of freedom for the numerator and denominator for one-way ANOVA test (5)

13.2 Conduct a one-way ANOVA test - Critical Value Approach

- 13.2.1 Conduct a One-Way ANOVA test - Critical Value Approach
  - Determine the critical value and rejection region for one-way ANOVA test (5)
- 13.2.2 Calculate the Test Statistic - One-Way ANOVA
  - Calculate the test statistic for one-way ANOVA test (5, 5)

13.3 Performing an ANOVA test with Technology - Critical Value Method

- 13.3.1-Calculator: Performing an ANOVA test with Technology - Critical Value Method
  - Make a decision for the hypothesis test using critical value/rejection region method and interpret results – Calculator
- 13.3.1-Excel: Performing an ANOVA test with Technology - Critical Value Method
  - Make a decision for the hypothesis test using critical value/rejection region method and interpret results – Excel

13.4 Performing an ANOVA test with Technology – P-Value Approach

- 13.4.1-Calculator: Performing an ANOVA test with Technology – P-Value Approach

- Make a decision for the hypothesis test using the p-value method and interpret results – Calculator
- 13.4.1-Excel: Performing an ANOVA test with Technology – P-Value Approach
  - Make a decision for the hypothesis test using the p-value method and interpret results – Excel