

Test 2 Topics

1. Chapter 7: ANOVA. Know how to fill out an ANOVA table.
2. Chapter 8: Multiple Regression. Know how to build a multiple regression model and analyze the ANOVA table.
3. Appendix B. Matrice: Be able to set up the matrix form of a regression.
4. Chapter 9: Set up a hypothesis test to determine the significance of variables in a full model and test the significance using the partial F test.
5. Chapter 10: Interpret the R^2 value
6. Chapter 11: Set up interaction terms. Interpret interaction term for different intercepts, parallelism and same lines. Determine the significance of interaction terms.
5. Chapter 12: Set up models with Dummy Variables. Write out the different models that include dummy variables and dummy variables with interaction. Interpret coefficients on dummy variables.
6. Chapter 14: Analyze Residual plots for the assumptions on a linear model. Look at Leverage plots and residual plots for points with high leverage and/or outliers. Know what an influential point is.
7. Chapter 15; Build and interpret a polynomial model.
8. Chapter 16: Use the criteria for model building and the methods of model building to determine a good model.