

Ashford BUS 308 Week 5 Complete

[CLICK HERE FOR Ashford BUS 308 Week 5 Complete](#)



Week Five Required Readings 1. Chapter 13: Simple Linear Regression Analysis 2. Chapter 15: Process Improvement Using Control Charts (on textbook website: http://highered.mcgraw-hill.com/sites/007340182x/student_view0/chapter_15.html) Discussions Linear Correlation. Do you think there is a correlation between CEO salaries and the degree of success of a company? If you were to take a sample of companies with comparable size, market capitalization, and product category, and plot CEO salaries against the net profit of their respective companies, do you expect to find a linear correlation between the two? Explain. Quality Control. Visit the websites on Quality Control (QC) listed in the Required Websites for this week. In addition, locate an article on the Internet or in the Library databases that describes an example of the use of statistics in Quality Control. In your post, briefly define Quality Control and explain its importance. Also, describe some of the most widely used tools in the industry for measuring and controlling quality, emphasizing their relationship to what you have encountered in this class. Finally, explain the example from your article of statistics as applied in a Quality Control context. Assignments Final Project. Focus of the Final Project To complete this project, use the "Final Project Data Set" found in your eCollege classroom in the Final Project description. Part I: 1. Calculate the mean yearly value using the average gas prices by month found in the "Final Project Data Set." 2. Using the years as your x-axis and the annual mean as your y-axis, create a scatterplot and a linear regression line. 3. Answer the following questions using your scatterplot and linear regression line: a. What is the slope of the linear regression line? b. What is the Y-intercept of the linear regression line? c. What is the equation of the linear regression line in slope-intercept form? d. Based on the linear regression line, what would be an estimated cost of gas in the year 2020? e. What are the residuals of each year? f. Select a current price that you have seen or paid recently for gas. Is that price within the range of the linear regression line or is it an outlier? Is it within the confidence interval of 5% or either end? Part II: Imagine that you are a manager at a delivery service and you are creating a report to project the effects on your company of rising gas prices in the next ten years. Using the preceding statistical analysis as your basis and outside scholarly resources to support your claims, write a 3 to 5 page paper interpreting the results from this perspective. Include the following considerations: 1. Introduce the project and its significance to the company. 2. Explain the statistical analysis that you completed in Part I. Be sure to explain where the data came from, what analysis was done, and what the results were. 3. Give conclusions that you have drawn from the data. Consider the effects of your gas price predictions on the delivery business. Also consider whether or not you believe your predicted gas prices are accurate. What could occur in the future that would change your linear regression line and therefore your prediction?