Background:

Linear Regression Forecasting and Decision Trees

Why is Forecasting important? How can we use Linear Regression as a forecasting method?

Read this introductory resource: [Forecasting for Business and Using Linear Regression](https://tlc.trident.edu/content/enforced/88075-BUS520-OCT2016FT-2/Forecasting%20for%20Business%20and%20Using%20Linear%20Regression_Module%203%20Background_BUS520.docx?_&d2lSessionVal=ZbEvAGNnzu9AHsSVR31NaRVHT&ou=88075) (attached)

Read Chapter 6, Regression Analysis pp. 159–166, in this resource:

Chase, C. W. (2013). Demand-driven forecasting: A structured approach to forecasting. John Wiley & Sons: Somerset, NJ. Retrieved from the Ebrary. Could not retrieve chapter 6 from Ebrary but found Chapter 6 on google (https://books.google.com/books?id=oe1CYQ5TxW0C&pg=PT62&source=gbs\_selected\_pages&cad=2#v=onepage&q&f=false)

The topics discussed here include:

1. Definition of regression
2. Correlation and regression
3. How to calculate the regression equation of X on Y.

OPTIONAL: Two videos on Khan Academy showing how to calculate regression coefficients.

Regression Line Example: [*http://www.khanacademy.org/video/regression-line-example?topic=statistics*](https://www.khanacademy.org/video/regression-line-example?topic=statistics)

Second Regression Example: [*http://www.khanacademy.org/video/second-regression-example?topic=statistics*](https://www.khanacademy.org/video/second-regression-example?topic=statistics)

PRACTICE: Download the Excel file [Linear Regression Practice Examples](https://tlc.trident.edu/content/enforced/88075-BUS520-OCT2016FT-2/Linear%20Regression%20Practice%20Examples_Module%203%20Background_BUS520.xlsx?_&d2lSessionVal=ZbEvAGNnzu9AHsSVR31NaRVHT&ou=88075) (attached) which provides an examples and practice problems to learn how to do regression analysis in Excel.