

Short Problem Set 5

Fit the model $y = \beta_0 + \beta_1 x$ to the following data

x : 0, 1.00, 2.00, 3.00, 4.00, 5.00

y : 0, 0.94, 2.15, 3.19, 3.70, 4.21

and report the coefficient of determination, the standard deviation about the regression, and an analysis of variance. You may use Excel to help you with the various summations needed to complete the calculations. Prepare a plot and add the regression line. Briefly discuss whether the regression model is a suitable model for this data.