

Homework 2 Questions:

Data Set: Noise date (n=50). This data can be downloaded from my website. For this exercise we are just concerned with two variables: Sales Price (dependent variable) and one independent variable, Size (area or square footage).

Using either Excel or starting your SPSS trial version, please try the following. Bring your output to class.

1. Estimate the parameters for B_0 and B_1 and statistics b_0 and b_1 (what is the best model?). Write-out the regression equation.
2. Examine the aptness of the model (are we doing the right thing?). Graph the residuals and evaluate. Are we violating the linearity, homoskedasticity or normality assumptions?
3. Examine the strength of the model (are we doing a useful thing?). Evaluate the strength of the model. Look at F test, t tests, and r^2 .
4. 95% confidence interval: B_1 .
5. 95% confidence interval: $U_{y|x=1080}$ sf
6. 95% prediction interval: Y_{new} when $x=1080$ sf