## 2.1: Introduction to Simple Linear Regression

Dr. Bean - Stat 5100
(Review) What is the difference between a functional and a statistical relationship?
(Review) What does it mean to be linear?
If I start with $n$ degrees of freedom, how many DF do I have left after calculating the residuals in the Toluca example?
Now suppose that my model equation was actually $\hat{Y} = b_0 + b_1 X_1 + b_2 X_2$ how many DF would I have left after calculating the residuals?

In the Toluca Example (notes 2.1.1), what is our best estimate of the variance of the

residuals?