

## 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  $\hat{Y} = b_0 + b_1X_1 + b_2X_2$  how many DF would 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?