Homework 1, Due Thursday, September 3

1. Give an example design for each of the following: 1) Completely randomized design; 2) Block design; 3) Split-plot design. For each design, specify the treatment factors and their levels. You may come up with designs of your own or use examples in literature (books, papers or Internet). If you use an example in literature, please provide references.

2. The following are 10 corn yields in bushels per acre: 250, 249, 246, 248, 250, 246, 249, 245, 249.

   a. Find the sample mean and sample standard deviation (in bu/acre)

   b. For easy book keeping, the data are recorded by minus 200 so the yields now become 50, 49, 46, 48, 50, 46, 49, 45, 49. Will the standard deviation change? Why? What about the mean?