

Statistics 5301
Spring 1996
Oehlert

Data for Exam #1

Questions related to the following data will be on the April 22 in class exam. Analyze these data and bring your notes/output with you to the exam. The exam is for evaluation, so you should do your analysis by yourself. If you have questions, contact the instructor. In your analyses, remember to check for assumptions and study interactions.

An experiment studied the effects of three factors on the amylase specific activity of sprouted maize. The factors were variety of maize (2 varieties), temperature at which the maize was sprouted (25 or 13 degrees C), and temperature at which the analysis was conducted (8 levels, 40, 35, 30, 25, 20, 15, 13, and 10 degrees C). There are three units for each factor/level combination in completely randomized design, for a total of 96 observations. Analyze these data to determine the effects and interactions of the three factors.

The data may be found in the following locations:

- From the Statistics homepage (<http://www.stat.umn.edu>), link to Classes, then 5301, then exam 1 data.
- On the Stat St. Paul Appletalk zone in the Classes:5162:Oehlert folder as file amylase.dat.

This file is in MacAnova matread format and includes some documentation in the header as well as the actual data. You may access the data via `matread("amylase.dat")`. A copy of the file is on the reverse of this sheet.