Feedback from Midterm

0. Marks are in Gradebook, scripts in SW, answers are posted.
1. The marks were terrible. Avg 41%, and ranging from 2% to 80%.
    (Grade distribution emailed assumes better performance in future).
2. Suggestion: students should
                  attend lectures
                  read posted notes - easy access
                  read the assigned readings at least once!
                  get help with material you do not understand
                          your friends – study groups?
                          stat workshop
                          my office hours
                          between or after lectures
3. Midterm II will be March 16. Similar in style. Get ready for it.
4. Language Problems: verbalization important for understanding
                          definitions page on web

A second look at the Midterm I answers: what did you have to do to be able to answer?

The Eddy article on "The Last Frontier: understanding the human mind"

MRI – method of detecting map of brain activity
Investigator wanted to be able to detect a specific kind and intensity of brain activity
Devised a series of tasks requiring an increasing "memory load"
Wanted to show that increasing memory load could be seen as increasing activity in a certain part of the brain.

Design issues: What memory tasks to set
                        How to establish cause and effect – (expt, dose-response)
                        How to reduce variability of the response

"Use repetition, control what you can, and randomize the rest"
                        10 subjects
                        within-subject comparisons
                        repetitions within subjects

                        randomize the order of memory load intensities p 219
Result: Graph p 224

What do you need to get out of the article?

                Principles of Study Design

Use of randomization
Importance of understanding context to analyze data

Turkey Mail (Kahn and Roseman article p 373) was an experiment. The units of study were the emails, and the "treatments" were the assignment of SUBJECT and DAY-of-WEEK.

Review of "Experiment": Clinical Trial is an example.=

Dangers of Observational Studies: Simpsons Paradox. (this is postponed until next time).