Homework 11- Due Friday, May 6

Do Problems 10.98, 10.102, 10.104, 10.105, 10.106 and the problem below

Homework should be written neatly and clearly explained. If it requires more than one sheet, the sheets must be stapled. Include your name and id number in the top right corner of your homework.

- **Problem 1.** (a) Simulate $\sum_{i=1}^{n} Y_i$ in problem 10.102, with n = 100 and p = .55 in R. Does your simulation lead to a rejection of $H_0: p = p_0$, with $p_0 = .5$ at an $\alpha = .05$ level?
- (b) Repeat the simulation in the previous part 1000 times. What proportion of the time was H_0 rejected? How is this proportion related to the power of the test?