MATH 358/658 Assignment 7
Due March 26.

- Page 484 #6, #8
- Page 494 #2, #4, #7
- Open 'CI Script.R'. You will modify this R script to answer the following two questions.

  1. Simulate 1000 samples of size $n = 20$ from a $N(\mu = 10, \sigma = 1)$ density, and for each compute the 95% confidence interval for μ. How many of your samples produce a confidence interval which contains the true μ?
  2. Now make a one-sided 90% confidence interval for μ as $(-\infty, c)$ for 1000 simulated samples of size $n = 20$ from a $N(\mu = 10, \sigma = 1)$ density. How many of these contain the true value $\mu = 10$?

  Obviously, you will need to modify the existing script to handle all changes related to n, σ, and the number of simulations. When your script functions correctly, save it and e-mail it to me (erhardrj@wfu.edu) so I can verify you've done the problem correctly. An excellent way to verify your script is correct is to save it, close R, re-open R, and simply highlight the entire script and press F5. It should run without error.