

STAT 672  
Homework 1  
due Wed. Feb. 1

3 Problems. Show all work. Please follow the Lab report directions off the homework web page for R Problems.  
Please work in Groups 2

The numbers refers to *Hollander, Wolfe, and Chicken*, if not specified otherwise. Some problems have additional parts. Note: The number 2 in 2.4 indicates the chapter.

1. p. 21: 2.4

Use the R function `binom.test` for the (2.3) procedure. Be sure to include your call to the function and the output.

2. p. 21: 2.5 (a)-(c)

You have 3 points, so include a plot of the power function using R.

3. p. 31: 2.16

We will just obtain and compare two CIs: the Clopper-Pearson CI and the LaPlace-Wald CI.

In R, the `binom.test` for the exact CI uses the procedure by Clopper-Pearson. Use the R function `binom.test` for the exact CI. Be sure to include your call to the function and the output. Compare the exact CI from the `binom.test` to results obtained using the LaPlace-Wald equations (2.29) and (2.30), using R for the calculations.