

STAT 672  
Homework 10  
due Wed. April 26

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

The numbers refers to *Hollander and Wolfe*, if not specified otherwise. Some problems may have additional parts.

1. p. 427, 8.34

Use  $B = 1000$  bootstrap replicates. You do **not** need to compare your results with those of Problem 3.28. You should construct a 90% percentile CI. There is an R `tauboot` function available off the course calendar for you to use with the R `bootstrap` function. (It is a good idea to use the function `set.seed` so that you can reproduce your results.)

The data is available off the class web page at:

<http://www.rohan.sdsu.edu/~babailey/stat672/brain.dat>

2. Problem 1 (cont.)

Now use the BCa method (R `bcanon` function from Lab 3) to find a CI. Use  $B = 1000$  bootstrap replicates. What are the estimated values for  $\hat{z}_o$  and  $\hat{a}$ ? Compare your CI results to your R `bootstrap` function results from Problem 1. (It is a good idea to use the function `set.seed` so that you can reproduce your results.)

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See p. 425-426, #33 for more information.

3. p. 427, 8.36.