

STAT 672, Spring 2011  
Homework 6  
due Thurs. March 10

Show all work.

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

1. p. 157, 5.1

You can use the R function `ansari.exact` in the library `exactRankTests` or the R function `ansari_test` in the library `coin`. Be sure to state your hypotheses. At the  $\alpha = 0.10$  level, what is your conclusion?

The data is available off the class web page at:

<http://www.rohan.sdsu.edu/~babailey/stat672/t4-1.txt>

2. Repeat Problem 1 using an F test and the R function `var.test`. Be sure to state your hypotheses. At the  $\alpha = 0.10$  level, what is your conclusion? Compare the results of Problem 1 and Problem 2.

3. p. 158, 5.6.

If you choose to illustrate using the data in Table 5.1, you may use the ranking scheme information of the data on p. 148. Verify directly does not use the data in Table 5.1.