DATA130004: Homework 6

Due in class on November 21, 2018

1. Exercises 5.15.

   Note that when the interval range $(0, 1)$ is divided into five equal-length subintervals, the density provided in the textbook does not have integral one within the subinterval. Derive the correct density for yourself.

   Moreover, please divide the integral range into five pieces with quantiles of the importance function $f_3(x)$, and make comparison with simulations.

2. Exercises 6.1.

3. Prove that the k-level trimmed mean estimator has expectation zero when n random samples are independently generated from standard normal distribution.