

Quiz 7

Name:

Remember to state the logic behind your answers. If you use any variables, please state what the variables represent.

Consider sampling n observations from a uniform distribution on $-C$ to C for some unknown C . Note that this distribution has expectation 0, variance $C^2/3$, and pdf $f(x) = 1/2C$ for $-C \leq x \leq C$ and 0 otherwise.

1. Write out the log likelihood function.

2. Find the maximum likelihood estimator for C .

3. Set up the method of moments equations for C .