

1st April, 1952.

Dear Mr Sarhan,

The cases you refer to are peculiar in that the amount of information is infinite and ordinary large sample theory does not apply. Rather curiously, the principle of sufficiency is applicable and it is easy to show that the least observation of the sample supplies sufficient estimation in location for the exponential case. The sufficient estimate in this case is the value with largest possible, but not maximum, likelihood. I imagine that in the ordinary cases the merit of maximum likelihood is solely in it being the largest possible.

Sincerely yours,

[+ rectangular and exponential  
distributions] - J.H.B.