

Department of Mathematics and Statistics KFUPM
STAT 319-03, Term 151, Quiz#4, Time: 30 mins

Instructor's Name: (Abbas)

Student's Name: _____ ID: _____ Section#: 03

Q.No.1:- The time until recharge for a battery in a laptop computer under common conditions has a mean of 260 minutes and a standard deviation of 49 minutes.

- a) If a random sample of 36 batteries is selected, what is the probability that the mean recharging time is at most 340.6 minutes?

- b) If a random sample of 25 batteries is selected, what mean recharging time is exceeded by 95% of all groups (samples) of 25 batteries

c) What should be the sample size such that the probability that mean recharging time exceeds 340.6 is 5%?

d) Are you using any approximation result for the above parts? If any, name it.