

Question set 1:

A research shows that the average waiting time for banking service was 0.75 hours last year. In order to test whether the average waiting time this year differs from last year, a sample of 20 data were collected this year with a mean of 0.73 hours and standard deviation 0.22 hours.

(1) Calculate the 99% confidence interval for the true waiting time for banking service this year. Interpret the result. (3 points)

(2) The 99% confidence interval for banking service this year has a wider range than 95% confidence interval for banking service this year. (2 points)

A. True

B. False

(3) How large a sample size needed with 90% confidence with a confidence interval width of 0.06. (3 points)

