TOPIC

Engineering Probability and Statistics – Section II – Question 7

QUESTION

We wish to estimate the mean μ of a population by the sample mean, $\bar{x}$, drawn from the population. Let n and s be the sample size and sample standard deviation, respectively. The probable accuracy of the estimate improves with an increase in

(A) μ
(B) s
(C) n
(D) μ+s

HINT

The simple sample average is an unbiased point estimate for μ, and the standard error of this estimator is $\frac{\sigma}{\sqrt{n}}$.