

Answer on Question #67871 – Math – Statistics and Probability

Question

Which of the following statements about the sampling distribution of the sample mean \bar{X} is not correct?

(a) For an infinite population, the standard error of the mean is always equal to the population standard deviation divided by the square root of the sample size.

or

(b) For a finite population of size N , the standard error of the mean is always equal to $\frac{1}{N} \frac{n}{n} N \hat{\sigma}$

Solution

The statement (a) is not correct, because for an infinite population, the standard error of the mean is the sample standard deviation (the sample estimate of the population standard deviation) divided by the square root of the sample size.

Answer: (a).