INFERENCE 26

Under what conditions would it be meaningful to construct a confidence interval estimate when the data consist of the entire population?

(A) If the population size is small ($n < 30$)

(B) If the population size is large ($n \geq 30$)

(C) If a higher level of confidence is desired

(D) If the population is truly random

(E) Never

Answer: (E) In determining confidence intervals, one uses sample statistics to estimate population parameters. If the data are actually the whole population, making an estimate has no meaning.