Congratulations! You passed!

Grade received 100% **To pass** 80% or higher

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1. What is the difference between a sample and a population in statistics? **1 / 1 point**

- A sample is the entire group being studied, while a population is a subset of that group.
- A population is the entire group being studied, while a sample is a subset of that group.
- A sample is the entire group being studied, while a population is a subset of a sample.

Correct
Correct! A population is the entire group being studied, while a sample is a subset of that group.

2. Which of the following statements best describes the law of large numbers? **1 / 1 point**

- The law of large numbers states that as the sample size increases, the sample mean becomes more variable.
- The law of large numbers states that as the sample size increases, the sample mean approaches the population mean with increasing accuracy.
- The law of large numbers states that as the sample size increases, the sample variance approaches the population variance.
- The law of large numbers states that as the sample size increases, the sample becomes more biased.

Correct
Correct! The law of large numbers states that as the sample size increases, the sample mean approaches the population mean with increasing accuracy.

3. Which of the following best describes the central limit theorem? **1 / 1 point**

- The central limit theorem states that the mean of a population is always normally distributed.
- The central limit theorem states that as the sample size increases, the sample mean approaches the population mean.
- The central limit theorem states that as the sample size increases, the sampling distribution of the mean approaches a normal distribution, regardless of the distribution of the population.
- The central limit theorem states that as the sample size increases, the variance of the population decreases.

Correct
Correct! The central limit theorem states that as the sample size increases, the sampling distribution of the mean approaches a normal distribution, regardless of the distribution of the population.