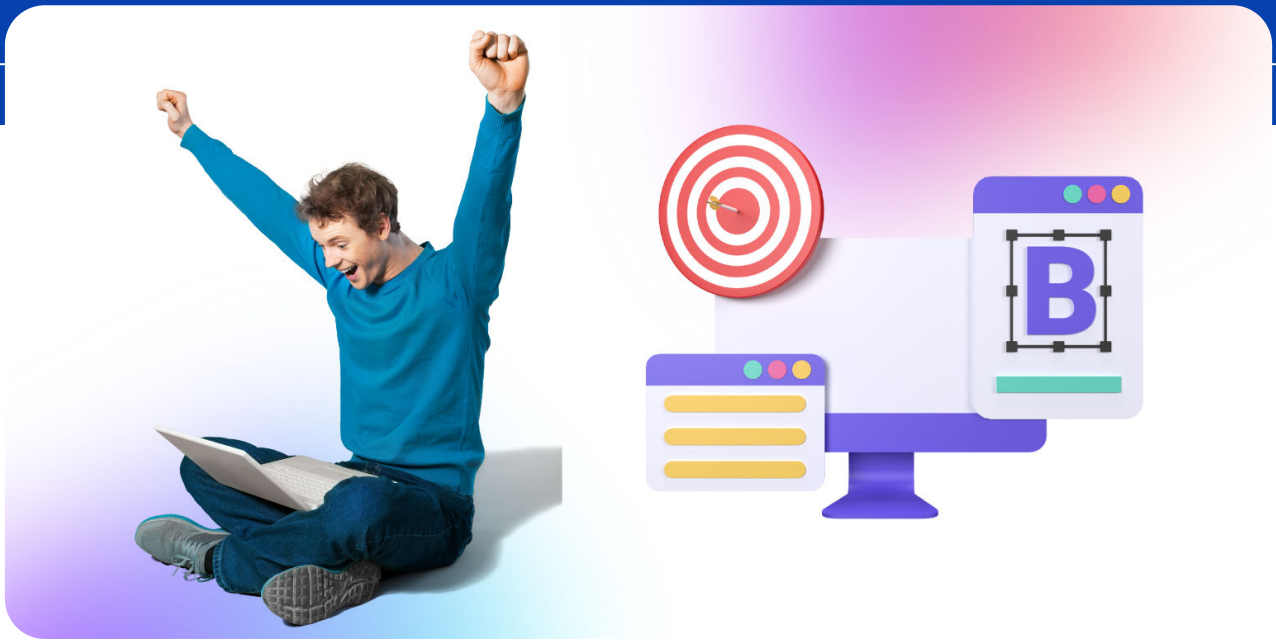
Edulyte

CENTRAL LIMIT THEOREM FORMULA

The concept of the central limit theorem is the basis of statistics. It is necessary to develop an understanding of means and sum. This concept is practically applicable to data management and the digital world. In this article, you will get to know about the definition and background of this theorem, its significance, application, limitations, common mistakes, and so on. In the last, you can check your understanding through the worksheet.

Read more



Q1: Which statistical parameter does the Central Limit Theorem primarily concern?

A: Median
B: Variance
C: Standard deviation
D: Mean

Q2: The Central Limit Theorem states that as the sample size increases, the distribution of sample means approaches:

A: A uniform distribution
B: A normal distribution
C: An exponential distribution
D: A Poisson distribution

Q3: Which of the following is NOT a characteristic of a normal distribution?

A: Symmetrical shape
B: Bell-shaped curve
C: Mean, median, and mode are all equal
D: Skewed tail on one side

Q4: What is the formula of the central limit theorem?

A: $\mu \bar{x} = \mu$
B: $\mu\bar{} = \mu$
C: $\bar{x} = \mu$
D: both B and C

Q5: Which distribution is related to increasing size?

A: Normal
B: No distribution
C: Infrequent distribution
D: both B and C

Q6: What is used in the central limit theorem?

A: Mean
B: Mode
C: Median
D: None of these

Q7: Central limit theorem useful in present life?

A: Yes
B: No

Q8: Where is the usefulness of the central limit theorem?

A: Population scale
B: Data analysis
C: Both A and B
D: Only A

Q9: What are the general mistakes in the central limit theorem that students commit?

A: Use of normal distribution in each data
B: Confuse with the expressions
C: Both A and B
D: None of the above

Q10: What does the central limit theorem contain?

A: Population mean
B: Sample mean
C: Both a and b
D: None of them

Answers

Q1: D - Mean

Q2: B - A normal distribution

Q3: D - Skewed tail on one side

Q4: A - $\mu_{\bar{x}} = \mu$

Q5: A - Normal

Q6: A - Mean

Q7: A - Yes

Q8: C - Both A and B

Q9: C - Both A and B

Q10: C - Both a and b