

**Knowledge Check** 

# A statement made about a population for a testing purpose is called:

- A. Statistics
- B. Hypothesis
- C. Parameter estimate
- D. Test statistics



### Knowledge Check

## A statement made about a population for a testing purpose is called:

- A. Statistics
- B. Hypothesis
- C. Parameter estimate
- D. Test statistics



#### The correct answer is **B**

A hypothesis in statistics is a proposed explanation or assumption about a population parameter made to test through statistical analysis.

2

- A. Acceptance of the null hypothesis
- B. Rejection of null hypothesis
- C. Depends upon whether the test is one- or two-sided
- D. Depends on the sample size



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# What does critical region lead to?

- A. Acceptance of the null hypothesis
- B. Rejection of null hypothesis
- C. Depends upon whether the test is one- or two-sided
- D. Depends on the sample size



The correct answer is **B** 

The critical region leads to the rejection of the null hypothesis.

## In the context of hypothesis testing, what does a Type I error represent?

- A. Accepting a true null hypothesis
- B. Rejecting a false null hypothesis
- C. Rejecting a true null hypothesis
- D. Accepting a false null hypothesis



#### Knowledge Check

3

### In the context of hypothesis testing, what does a Type I error represent?

- A. Accepting a true null hypothesis
- B. Rejecting a false null hypothesis
- C. Rejecting a true null hypothesis
- D. Accepting a false null hypothesis



#### The correct answer is **C**

A Type I error occurs when the null hypothesis is true but is rejected incorrectly. It's a false positive.

