

28 Lecture - CS402

Important Mcqs

1. Which of the following best describes a pseudo theorem?

- a) A statement that is always true
- b) A statement that appears to be true, but is actually false
- c) A statement that is neither true nor false
- d) A statement that is too complex to understand

Answer: b) A statement that appears to be true, but is actually false

Pseudo theorems can be misleading because they:

- a) Are always intentionally false
- b) Are always presented with poor writing
- c) Can appear to be rigorously proven
- d) Are only found in mathematics

Answer: c) Can appear to be rigorously proven

What is the best way to identify a pseudo theorem?

- a) By checking if it is always true
- b) By checking if it is always false
- c) By carefully scrutinizing its assumptions and logical steps
- d) By asking a friend who is good at math

Answer: c) By carefully scrutinizing its assumptions and logical steps

Which of the following is an example of a pseudo theorem?

- a) The sum of two odd numbers is always odd
- b) Every prime number greater than 2 is odd
- c) Every even number can be written as the sum of two prime numbers
- d) All real numbers are rational

Answer: d) All real numbers are rational

Pseudo theorems can be harmful because they can:

- a) Lead to incorrect conclusions and wasted effort
- b) Improve our understanding of mathematics
- c) Encourage critical thinking skills
- d) Increase the popularity of mathematics

Answer: a) Lead to incorrect conclusions and wasted effort

What is the difference between a pseudo theorem and a paradox?

- a) A pseudo theorem is always false, while a paradox is always true
- b) A pseudo theorem appears to be true, while a paradox appears to be false
- c) A pseudo theorem is a false statement, while a paradox is a self-contradictory statement
- d) A pseudo theorem and a paradox are the same thing

Answer: c) A pseudo theorem is a false statement, while a paradox is a self-contradictory statement

Which of the following is a pseudo theorem related to calculus?

- a) Every continuous function has a derivative

- b) Every polynomial of odd degree has at least one real root
- c) Every limit exists
- d) Every function has a power series expansion

Answer: d) Every function has a power series expansion

Pseudo theorems are most commonly found in which subject area?

- a) Geometry
- b) Algebra
- c) Calculus
- d) Trigonometry

Answer: c) Calculus

Why is it important to be aware of pseudo theorems?

- a) They are always true
- b) They are never true
- c) They can be misleading and cause incorrect conclusions
- d) They are always easy to identify

Answer: c) They can be misleading and cause incorrect conclusions

Which of the following is an example of a pseudo theorem related to geometry?

- a) The sum of the interior angles of a triangle is always 180 degrees
- b) The Pythagorean theorem
- c) The formula for the area of a circle
- d) Every regular polygon can be inscribed in a circle

Answer: d) Every regular polygon can be inscribed in a circle