

1

Questions

1. What is a unique property of the number 1 in number theory?

- A. It forms the basis of all numbers.
- B. It is the largest natural number.
- C. It is neither prime nor composite.
- D. It is both even and odd.

2. What role does the digit '1' play in the binary numeral system, often used in computing?

- A. It represents the presence of a quantity or a 'true' state.
- B. It signals an operation error in computing.
- C. It indicates the start of a new byte.
- D. It is used solely for representing decimal numbers.

3. In the context of probability theory, what does the number 1 represent?

- A. It represents certain events.
- B. It defines the boundary for probability sums.
- C. It is used as a limit in probabilities.
- D. It marks impossible events.

4. In the context of mathematical induction, why is the number 1 significant?

- A. It is a common factor in prime decomposition.
- B. It is often used to prove the initial case in mathematical induction.
- C. It serves as a fundamental identity in multiplication.
- D. It denotes the maximum value in a probability distribution.

5. In the context of exponents, what happens when a number is raised to the power of 1?

- A. The result is always 1, regardless of the base.
- B. The number remains the same.
- C. The number becomes zero.
- D. It causes the number to become negative.