

Think Fast! Level Up Your Logic Skills for University Success

Can you spot a shaky premise before it collapses? Deconstruct complex syllogisms and expose hidden informal fallacies in real-world scenarios.

1. In a philosophical debate regarding aesthetics, an artist argues: 'You cannot critique the composition of this mural because you have never painted a public installation yourself.' Which informal fallacy is being utilized?

- A. Red Herring
- B. Ad Hominem (Circumstantial/Tu Quoque)
- C. Appeal to Authority
- D. Hasty Generalization

2. True or False: In formal logic, an argument is considered 'sound' if and only if it is structurally valid and all of its premises are empirically true.

- A. True
- B. False

3. Apply the rule of Hypothetical Syllogism. Premise 1: If the central bank raises interest rates, then borrowing will decrease. Premise 2: If borrowing decreases, then consumer spending will slow down. Conclusion: _____.

- A. The central bank will not raise interest rates.
- B. Consumer spending will slow down if rates stay the same.
- C. If the central bank raises interest rates, then consumer spending will slow down.
- D. Borrowing will decrease regardless of the bank's actions.

4. Consider the following: 'Every piece of software I have downloaded from this developer has been bug-free. Therefore, the next update they release will likely be bug-free.' This is an example of:

- A. Deductive Proof
- B. Abductive Reasoning
- C. Inductive Generalization
- D. Affirming the Consequent

5. In the context of the 'Burden of Proof,' the claimant (the person making the assertion) is responsible for providing evidence, rather than the skeptic being responsible for disproving it.

- A. True
- B. False

6. Identify the logical operator missing here: In formal notation, the statement 'Neither the witness nor the defendant was present' is represented as the _____ of two negated propositions.

- A. Disjunction

Name: _____

Date: _____

- B. Conjunction
- C. Conditional
- D. Biconditional

7. An advocate for urban farming states: 'If we don't convert every vacant lot into a garden immediately, our city will face a total food systemic collapse within two years.' This reasoning primarily exemplifies a:

- A. Slippery Slope
- B. False Dilemma
- C. Post Hoc Ergo Propter Hoc
- D. Equivocation

8. In symbolic logic, the invalid argument 'If it is a diamond, it is hard; this substance is hard; therefore, it is a diamond' is a formal fallacy known as _____.

- A. Denying the Antecedent
- B. Affirming the Consequent
- C. Begging the Question
- D. The Fallacy of the Undistributed Middle

9. True or False: A 'Reductio ad Absurdum' is a valid method of argument that proves a claim by showing its denial leads to a logical contradiction.

- A. True
- B. False

10. Which of the following best describes the 'Principle of Charity' in critical thinking?

- A. Donating to educational causes for logic research.
- B. Interpreting an opponent's argument in its strongest possible form before critiquing it.
- C. Allowing an opponent to use fallacies without calling them out.
- D. Assuming that everything written in a peer-reviewed journal is true.