

Will Your Logic Hold Up? 12th Grade Foundations of Reasoning Quiz

Students identify fundamental patterns of valid inference and recognize common informal fallacies in real-world arguments to sharpen their analytical comprehension.

1. Identify the logical pattern: 'If the Supreme Court issues a ruling, then it becomes law. The Supreme Court issued a ruling. Therefore, it is law.'

- A. Modus Tollens
- B. Modus Ponens
- C. Disjunctive Syllogism
- D. Hypothetical Syllogism

2. In a deductive argument, if the premises are true and the structure is valid, the conclusion **MUST be true.**

- A. True
- B. False

3. When a debater ignores an opponent's actual position and instead attacks an exaggerated or misrepresented version of it, they are using the _____ fallacy.

- A. Red Herring
- B. Slippery Slope
- C. Straw Man
- D. Circular Reasoning

4. Which of these is an example of Inductive Reasoning?

- A. Every 12th grader I have met likes music, so all 12th graders likely like music.
- B. Since all mammals breathe air and a whale is a mammal, a whale breathes air.
- C. If it is a square, it has four sides. This is a square, so it has four sides.
- D. To graduate, one must have 24 credits. Sam has 24 credits, so Sam can graduate.

5. An argument that attacks the character of the speaker rather than the substance of their claim is known as an _____ argument.

- A. Ad Hominem
- B. Ad Populum
- C. Appeal to Authority
- D. Hasty Generalization

6. A 'False Dilemma' fallacy occurs when someone suggests there are only two possible options when more actually exist.

- A. True
- B. False

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7. Identify the conclusion of this Disjunctive Syllogism: 'Either the power grid failed or the light bulb burned out. The power grid did not fail.'

- A. The power grid is working fine.
- B. The light bulb is still working.
- C. The light bulb burned out.
- D. The house is dark.

8. The logical principle 'Modus Tollens' is also known as the way of _____.

- A. Affirming
- B. Denying
- C. Assuming
- D. Comparing

9. An argument is considered 'Sound' if it is valid and all of its premises are actually true.

- A. True
- B. False

10. Which fallacy is present here? 'Every time I wear these socks, our team wins. Therefore, these socks cause us to win.'

- A. Post Hoc (False Cause)
- B. Bandwagon Appeal
- C. Genetic Fallacy
- D. Begging the Question