

Basic Logical Concepts

Multiple Choice

1. In which of the following subjects is reasoning outside the concern of logicians?
 - a. science and medicine
 - b. ethics
 - c. politics
 - d. none of the above

Answer: d

2. In correct reasoning,
 - a. all of the propositions are true
 - b. the truth of the premises guarantees the truth of the conclusion
 - c. the conclusion is never false
 - d. the conclusion supports the premises

Answer: b

3. The process of arriving at and affirming one proposition on the basis of one or more other propositions is called:
 - a. inference
 - b. hypothetical proposition
 - c. soundness
 - d. validity

Answer: a

4. "If undergraduate education in the Humanities is to be successful, students must take courses in a broad range of areas including history, literature, philosophy, and art."

This is an example of:

- a. an argument
- b. a disjunctive proposition
- c. a conditional proposition
- d. none of the above

Answer: c

5. "Either cigarette smoking in eating establishments should be banned or these establishments should have designated smoking areas."

This is an example of:

- a. an argument
- b. a disjunctive proposition
- c. a hypothetical proposition
- d. none of the above

Answer: b

6. "Cigarette smoking should be banned in all public eating and drinking establishments because second-hand smoke has been shown to be detrimental to one's health."

This is an example of:

- a. an argument
- b. a disjunctive proposition
- c. a hypothetical proposition
- d. none of the above

Answer: a

7. "(1) If you raise prices even a little, fewer people will buy your product. (2) If fewer people buy your product, your scale of production will become smaller. (3) If your scale becomes smaller, you won't be able to pay the same low bulk prices for supplies that you get now, and (4) if you pay higher prices for your supplies, your costs will go up. (5) If that happens, your profits will go down."

What is the conclusion of this passage?

- a. (1)
- b. (2)
- c. (5)
- d. There is no stated conclusion

Answer: d

8. "(1) The government should enact legislation permitting euthanasia. (2) Without this legislation people are denied their autonomy. (3) People have the right to die with dignity and ought to be able to choose to live or die."

What is the conclusion of this passage?

- a. (1)
- b. (2)
- c. (3)
- d. There is no stated conclusion

Answer: a

9. "In this area, a lot of snow usually means we'll have a cool summer. We've had a lot of snow this winter (even though it wasn't very cold). I think we'll have a cool summer."

This is:

- a. a deductive argument with an unstated conclusion
- b. an inductive argument with the last sentence as a conclusion

- c. neither inductive nor deductive, because its conclusion is false
- d. not an argument at all

Answer: b

10. "Women's liberation is solely the product of technological advances in the control of reproduction and the social need to have more bodies to tend to the machines produced by technology."

This is an example of:

- a. an argument
- b. a complex proposition
- c. a simple proposition
- d. none of the above

Answer: b

True/False

11. An invalid deductive argument is always unsound.

Answer: T

12. In logic, the truth of the premises must be established before any other analysis can occur.

Answer: F

13. An argument with a false premise cannot be valid.

Answer: F

14. No valid deductive argument can be made any stronger by adding more premises, no matter what the premises state.

Answer: T

15. If a passage does not contain a conclusion, it cannot be an argument.

Answer: F

Pattern Match

16. A _____ proposition makes only one assertion.

complex, **simple**, disjunctive

17. The _____ of an argument is the proposition that is affirmed on the basis of other propositions in the argument.

conclusion, premise, complex proposition

18. An inductive argument claims to support its conclusion only with some degree of _____.

validity, **probability**, soundness

19. _____ arguments are never evaluated in terms of validity.

Deductive, Sound, **Inductive**

20. An argument is _____ when it is valid and all of its premises are true.

sound, invalid, valid