

Philosophy 1115 (Logic) Homework Assignment #1

January 15, 2016

The following 30 T/F questions test your understanding of the basic logical concepts discussed in chapter 1 of *Modern Logic*.

- T F 1. If an argument has a false conclusion it is invalid.
- T F 2. The moon is made of green cheese.
- T F 3. No unsound arguments have a true conclusion.
- T F 4. If it is not possible for the conclusion of an argument to be false, then the argument is valid.
- T F 5. Every invalid argument has a false conclusion.
- T F 6. Some invalid arguments have a false conclusion.
- T F 7. All sound arguments are valid.
- T F 8. If two arguments have identical logical form, then either they are both valid or they are both invalid.
- T F 9. If an argument has true premises and a true conclusion, then it is sound.
- T F 10. No unsound arguments have a false conclusion.
- T F 11. If the conclusion of a valid argument is false, then at least one of its premises is false.
- T F 12. Some invalid arguments have a false premise.
- T F 13. No sound arguments have a false conclusion.
- T F 14. Some invalid arguments have a true conclusion.
- T F 15. Every invalid argument has a true conclusion.
- T F 16. A valid argument with twenty true premises and one false premise is more sound than an argument with three true premises and one false one.
- T F 17. Some unsound arguments have a false conclusion.
- T F 18. Some valid arguments are unsound.
- T F 19. No invalid arguments have a false conclusion.
- T F 20. If the conclusion of a valid argument is false, then all of its premises are false as well.
- T F 21. If the conclusion of a valid argument is true, the premises must be true as well.
- T F 22. If an argument is sound, then its conclusion follows from its premises.
- T F 23. All unsound arguments are invalid.
- T F 24. Some valid arguments have a true conclusion.
- T F 25. Every sound argument has a true conclusion.
- T F 26. If an argument is valid absolutely, then it is also sententially valid.
- T F 27. The following is a valid sentential form:
- $$\begin{array}{l} \text{If } P \text{ then } Q \\ Q \\ \therefore P \end{array}$$
- T F 28. The following is an invalid sentential form:
- $$\begin{array}{l} \text{Either } P \text{ or } Q \\ \therefore P \end{array}$$
- T F 29. The following argument is valid (absolutely): "Pete Sampras is a professional football player. If Pete Sampras is a professional football player, then Pete Sampras is bald. Therefore, Pete Sampras is bald."
- T F 30. The following argument is sound (absolutely): "If Prince William is unmarried, then Prince William is a bachelor. Prince William is a bachelor. Therefore, Prince William is unmarried."