

Philosophy 500 — Quiz #4. May 24.

Name: _____

Grade: / 10

A. Answer each of the following, using truth table rows to show your answer is right. You may have unnecessary rows (and write on the back if you need more space) if you want to, but you must explicitly identify which rows you're using to show it (but only use as many as are needed), or state the whole table is needed if that's the case. (3 pts. each)

1. Is the set $\{A \leftrightarrow \neg C, B \vee \neg C, C \vee \neg A\}$ consistent?

2. Is the argument $A \vee B, \neg A \rightarrow C \therefore A$ valid?

B. For each of the following, state whether it's true or false. If it's true, explain in detail how you can be sure of that. If it's false, give a counterexample (i.e. an example which shows it's false). (2 pts. each)

1. If $A \rightarrow \neg B$ is contingent, then $\{A, B\}$ is consistent.

2. If $A \leftrightarrow B$ is a contradiction, then $A \therefore \neg B$ is sound.