

Homework on §1.4—assigned Fri 9/6 and due Mon 9/9

For each of the following claims of entailment, describe a counterexample—that is, in each case, describe a possible world that shows the claim of entailment to be false by separating its assumptions from its conclusion. (To describe the possible world, just say what truth values the sentences ϕ , ψ , and χ would have in it.)

(i) $\phi, \psi \models \chi$

(ii) $\psi, \chi \models \phi$

Could one possible world serve as counterexample to both claims? That is, could a single possible world separate the assumptions from the conclusion in both cases? (Say why or why not.)