

3.3.x. Exercise questions

Use derivations to establish each of the claims of entailment shown below. You can maximize your practice in the use of CR by avoiding LFR and using Adj only when the goal is a conjunction.

1. $\neg (A \wedge \neg B), A \Rightarrow B$
2. $J \wedge \neg (J \wedge \neg C) \Rightarrow J \wedge C$ (see exercise 1j of 3.1.x)
3. $\neg (\neg (A \wedge B) \wedge C), \neg A \Rightarrow \neg C$
4. $\neg (A \wedge \neg (B \wedge C)) \Rightarrow \neg (A \wedge \neg B)$
5. $\neg (A \wedge \neg B), \neg (B \wedge \neg C) \Rightarrow \neg (A \wedge \neg C)$
6. $\neg (A \wedge \neg B), \neg (A \wedge \neg C) \Rightarrow \neg (A \wedge \neg (B \wedge C))$

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