

Worksheet 1E

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2016

1. Claim: Given the premise $\neg C$ prove or disprove using direct proof (3) method (proof by contraposition) that $(\neg A \wedge \neg B) \vee B \vee (\neg C \wedge A)$ follows.
2. Claim: Given the premise $\neg J \longrightarrow \neg L, \neg J \wedge G, L \vee \neg G$ prove or disprove that R follows.
3. Claim: Given the premises $L \longrightarrow J, B \longrightarrow A, \neg(J \wedge A) \vee C$ it must be the case that $(L \wedge B) \longrightarrow C$ follows. Prove or disprove the claim.
4. Claim: Given the premises $(A \vee W) \longrightarrow (H \wedge C), H \longrightarrow J, \neg J$ it must be the case that $\neg A$ follows. Prove or disprove the claim.