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Question One

Claim: $(A \land B) \to C, \neg\neg A \vdash (B \land D) \to (C \lor \neg D)$

Assume $(A \land B \to C)$ and $(A \land B)$
This would imply C (appl.)
Aswell as A and B (simp.)
This would satisfy $\neg\neg A$ (dbl. neg)
The propositions now all satisfy
Now assuming D,
C would imply $C \lor \neg D$ (weak.)
B and D would satisfy $B \land D$ (conj.)
We can now conclude $(B \land D) \to (C \lor \neg D)$ ■

Question two

Claim: $P \land \neg R \vdash \neg(P \to (Q \land R))$

Assume $P \to (Q \land R)$ and $P \land \neg R$
The second assumption would imply P and $\neg R$ (simp.)
The first assumption, along with P, would imply $Q \land R$ (appl.)
    $(Q \land R)$ would imply Q and R (simp.)
    R and $\neg R$ cannot hold, therefore $\neg(P \to (Q \land R))$ (condic.) ■
