Phil 57 section 3
Fall 2010

Homework: Conditional Proofs and Indirect Proofs

Prove the following, using conditional proofs for conclusions with conditionals and indirect proofs for conclusions that are not conditional:

1. ((R ∨ S) → T), ((P ∨ Q) → T), (R ∨ P)/ T

2. (((P → Q) → P) → S) / S

3. ((S ∨ T) → ~S) / ~S

4. ((P → P) → R), ((R ∨ S) → Q) / Q

5. ((P • Q) ↔ (R • S)), (R → S) / (R → Q)

6. ((P ∨ Q)→ R), ((~P ∨ S)→ T) / (R ∨ S)

7. (P → (Q ∨ R)), ((P → R)→ (T • S)), (Q → R) / T

8. (Q → (R → S)), (U → (T • R)) / (Q → (U → S))

9. (P → Q), (P → R) / (P → (R • Q))