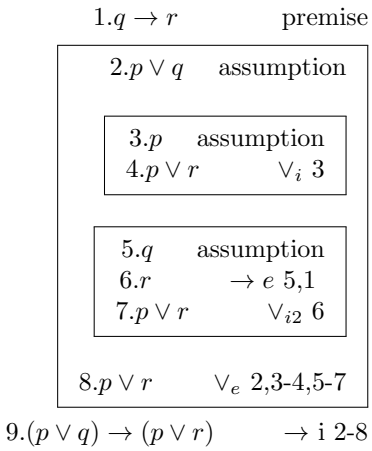
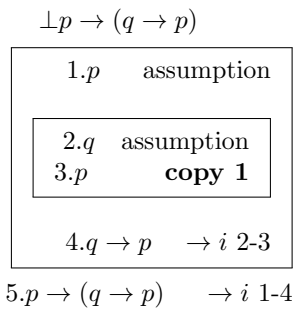
BITS Pilani Hyderabad Campus
CS F214 Logic in Computer Science,
I Semester 2021-2022
Lecture Notes
Lecture 7

Prove: $q \to r \vdash p \vee q \to p \vee r$



5.3 "Copy" Rule



6 Rules for Negation

6.1 Contradiction

- Contradictions are expressions of the form $\phi \wedge \neg\phi$ or $\neg\phi \wedge \phi$ where ϕ is any proposition.

- $\perp$ represents a contradiction.
- Any proposition can be derived from contradiction.

6.2 Bottom Elimination

$$\frac{\perp}{\psi}\perp e$$

6.3 Not Elimination

$$\frac{\phi \ \neg\phi}{\perp}\neg e$$