Logic I: Lecture 06 s.butterfill@warwick.ac.uk Readings refer to sections of the course textbook, <i>Language, Proof and Logic</i> .	Disjunction Introduction (\lor Intro) $ \begin{array}{c} P_i \\ \vdots \\ P_1 \lor \ldots \lor P_i \lor \ldots \lor P_n \end{array} $	4. Not Or Reading: §3.7 $ \begin{array}{c ccccccccccccccccccccccccccccccccccc$
1 . ∨ Intro and ∨ Elim <i>Reading:</i> §6.2	2. ∨Elim and Soundness<i>Reading:</i> §5.2, §6.2	$F F F T T T T$ 5. \rightarrow Intro: An Example $ \begin{array}{c} 1.P \rightarrow Q \\ 2.Q \rightarrow B \end{array} $
Disjunction Elimination (\lor Elim) $ P_1 \lor \ldots \lor P_n$ \vdots $ P_1$ \vdots	 Output Version Series 3. ∨ Elim: An Example To prove a conclusion from a disjunction, prove it from each disjunct. 	6. ¬Elim
$\begin{vmatrix} & & S \\ \downarrow \\ & & P_n \\ & & \vdots \\ & & S \\ \vdots \\ & & S \\ \vdots \\ & & S \\ & & & & & S \\ & & & & & & S \\ & & & & & & & \\ & & $	1. R∨S 2. 3. 4. 5. 6. S∨R	Reading: §6.3 Negation Elimination (¬ Elim) □ ¬P : P

7. ¬Intro

Reading: §5.3, §6.3

8. Subproofs Are Tricky

What is wrong with the following apparent proof?



