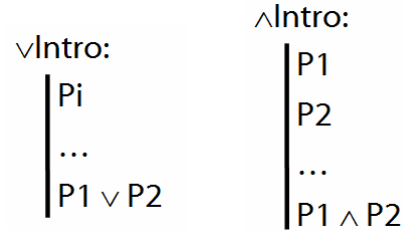
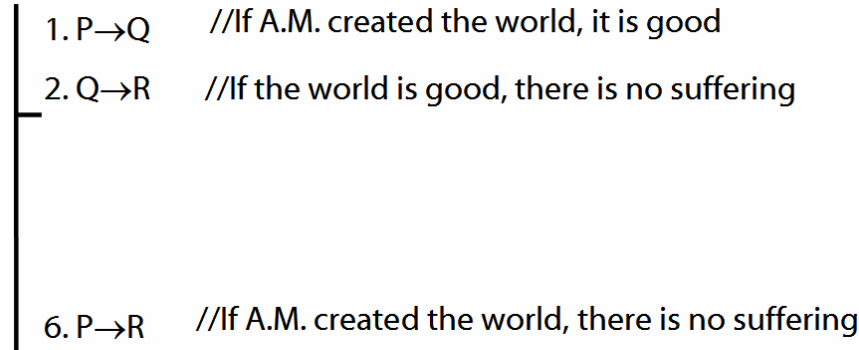
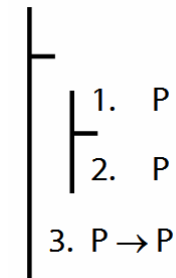
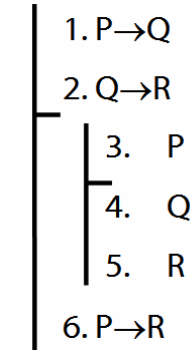
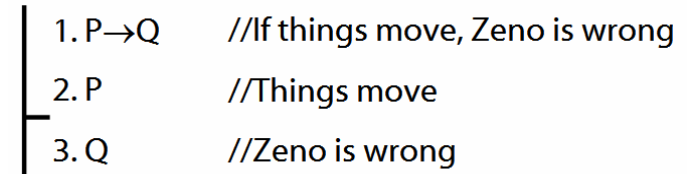
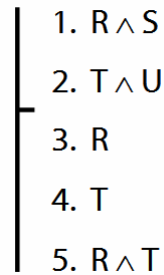
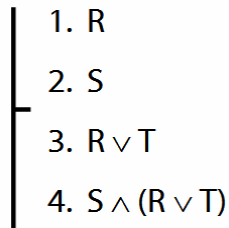
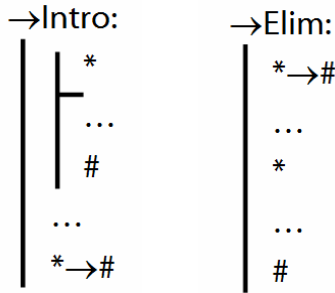
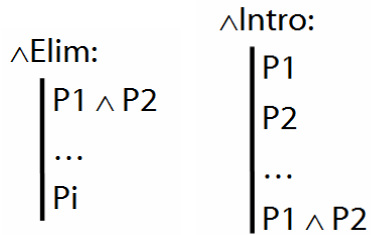


PH126 Starting Logic Lecture 9  
 Lecturer: s.butterfill@warwick.ac.uk



P1	P2	$P_1 \vee P_2$	$P_1 \leftrightarrow P_2$
T	T	T	F
T	F	T	T
F	T	T	T
F	F	F	F



1. $P \vee Q$		
<table style="border-collapse: collapse; margin-left: 20px;"> <tr> <td style="border-left: 1px solid black; padding-left: 5px;">2. <math>\neg Q</math></td> </tr> <tr> <td style="border-left: 1px solid black; padding-left: 5px;">8. <math>P</math></td> </tr> </table>	2. $\neg Q$	8. $P$
2. $\neg Q$		
8. $P$		
9. $\neg Q \rightarrow P$		

**PH126: Exercises 05**

for seminars in week 7.

**Exercises**

*More than usual because no lectures or seminars in reading week. Allow 8-12 hours.*

From Barwise & Etchemendy, *Language, Proof and Logic*. (\* = optional)

4.20–4.24 (\*4.25) [tt]

6.33, 6.34, 6.36, 6.37

[proofs]

6.40 (\*6.41–6.42)

7.1–7.8

7.12.1–7.12.19 odd numbers only

For 7.12.x also submit your answers on paper/by email.

[trans]

8.1 [principles]

8.3, 8.5, 8.7, 8.9 odd nos only

8.12

8.17 [proofs]

8.18–8.25 [proofs]

9.1 (odd nos) [quantifiers]

9.2 (evens) [quantifiers]