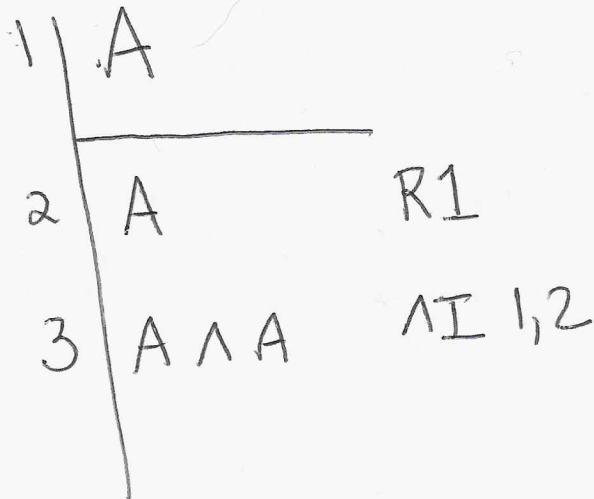
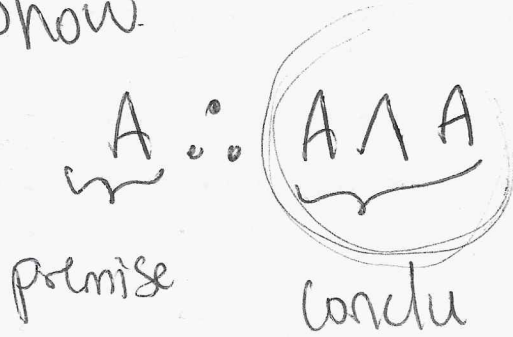
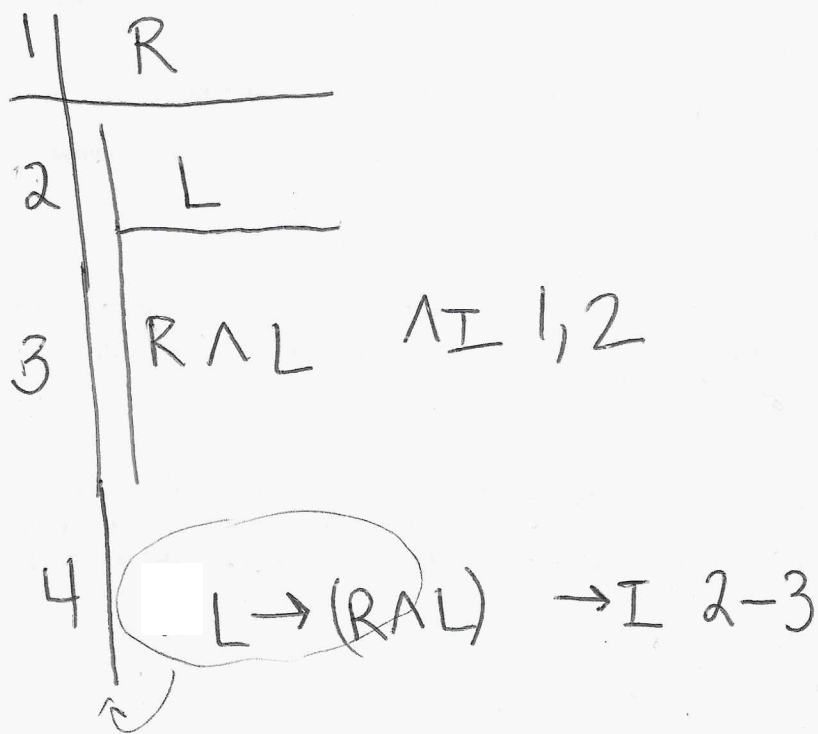


P. 119 | Show

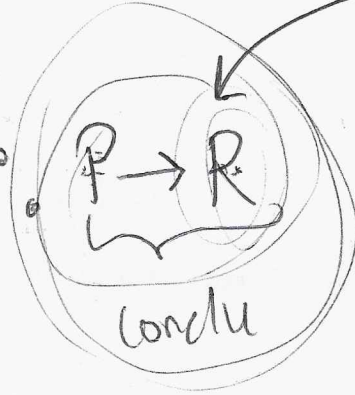


P. 120



p.122 | Prove

$P \rightarrow Q, Q \rightarrow R$
premises



need to
do
 $\wedge I$

2

1	$P \rightarrow Q$	
2	$Q \rightarrow R$	
3	P	
4	Q	$\rightarrow E$ 1,3
5	R	$\rightarrow E$ 2,4
6	$P \rightarrow R$	$\rightarrow I$ 3-5

Ex: $P \rightarrow Q, Q \rightarrow R \therefore P \rightarrow R$

$(P \rightarrow Q) \wedge (Q \rightarrow R) \models P \rightarrow R$

	1	$P \rightarrow Q$
	2	$Q \rightarrow R$
OK! \rightarrow	3	$P \rightarrow R$
	4	$P \rightarrow R$

not \rightarrow R3
 of reiteration ble line 3
 occurs in a subproof of
 rule only allows reiteration
 within same subproof

Show
 Ex: $\models B \rightarrow B$
 no premises conclusion

(no premises)

	1	B	
	2	B	R1
	3	$B \rightarrow B$	NI 1-2

P.126: their proof shows

$$A \models B \rightarrow (C \rightarrow (A \wedge B))$$

We could

$$\bigcirc \models A \rightarrow (B \rightarrow (C \rightarrow (A \wedge B)))$$

