

a

Opgave 5.31g. $p \wedge (q \vee r) \vdash (p \wedge q) \vee (p \wedge r)$.

1.	$p \wedge (q \vee r)$	ass
2.	p	$G\wedge, 1$
3.	$q \vee r$	$G\wedge, 1$
4.	q	ass
5.	$p \wedge q$	$I\wedge, 2, 4$
6.	r	ass
7.	$p \wedge r$	$I\wedge, 2, 6$
8.	$(p \wedge q) \vee (p \wedge r)$	$G\vee, 2-7$

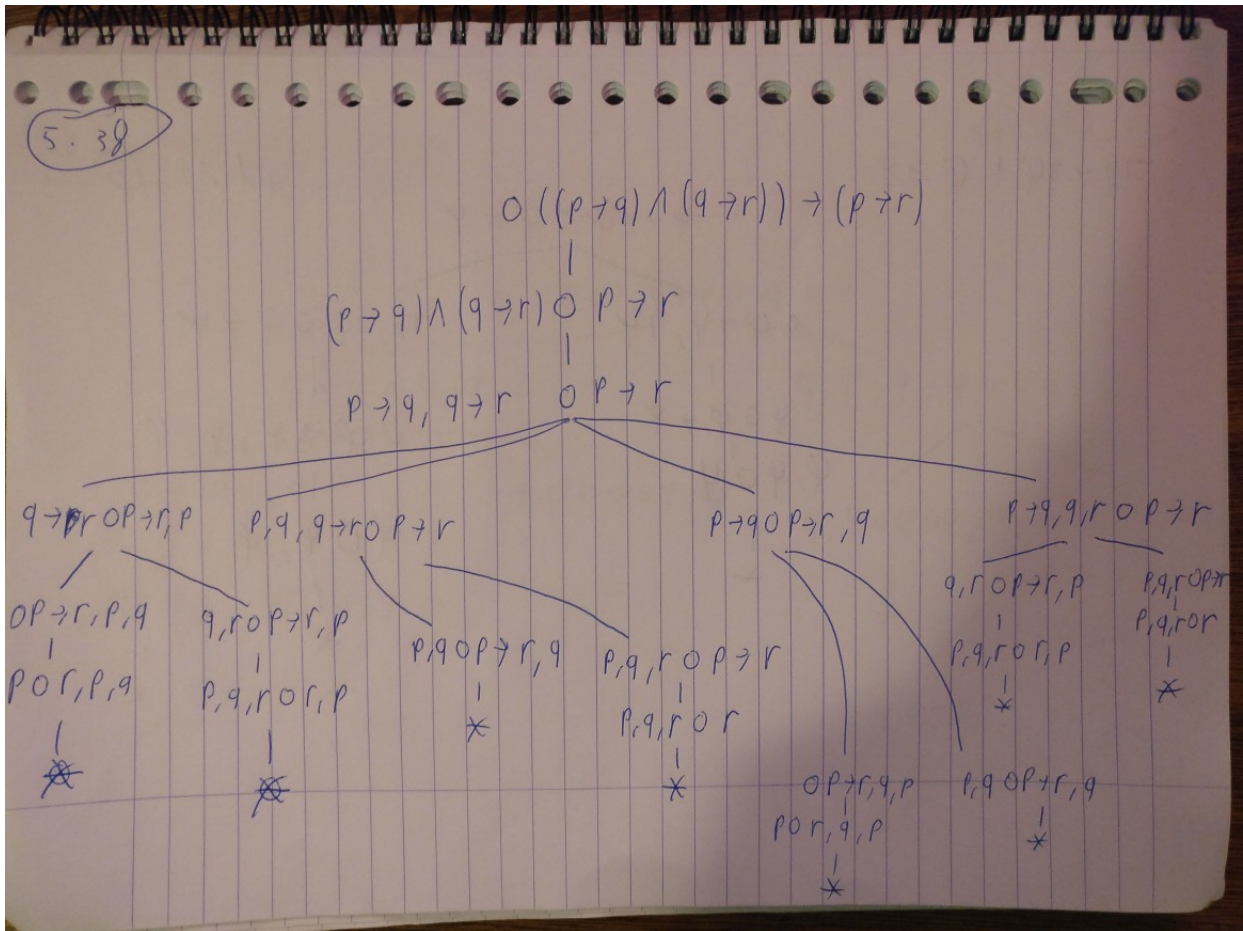
Opgave 5.322. $p \wedge (q \wedge r) \vdash r \wedge p$

1.	$p \wedge (q \wedge r)$	ass
2.	p	$G\wedge, 1$
3.	$q \wedge r$	$G\wedge, 1$
4.	r	$G\wedge, 3$
5.	$r \wedge p$	$I\wedge, 2, 4$

3. $p \rightarrow (q \wedge r), q \rightarrow s, p \vdash s$

1.	$p \rightarrow (q \wedge r)$	ass
2.	$q \rightarrow s$	ass
3.	p	ass
4.	$q \wedge r$	$G\rightarrow, 1, 3$
5.	q	$G\wedge, 4$
6.	s	$G\rightarrow, 2, 5$

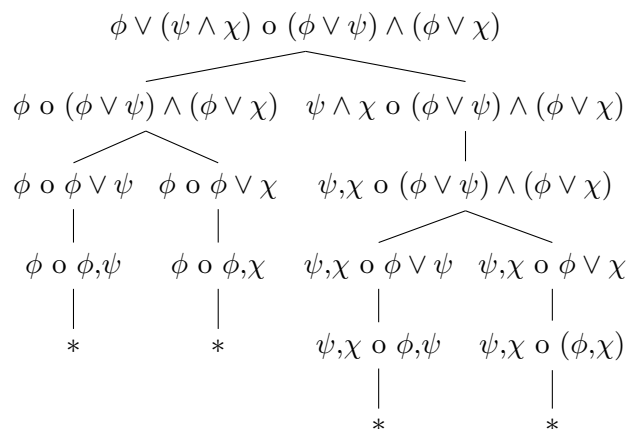
Opgave 5.38



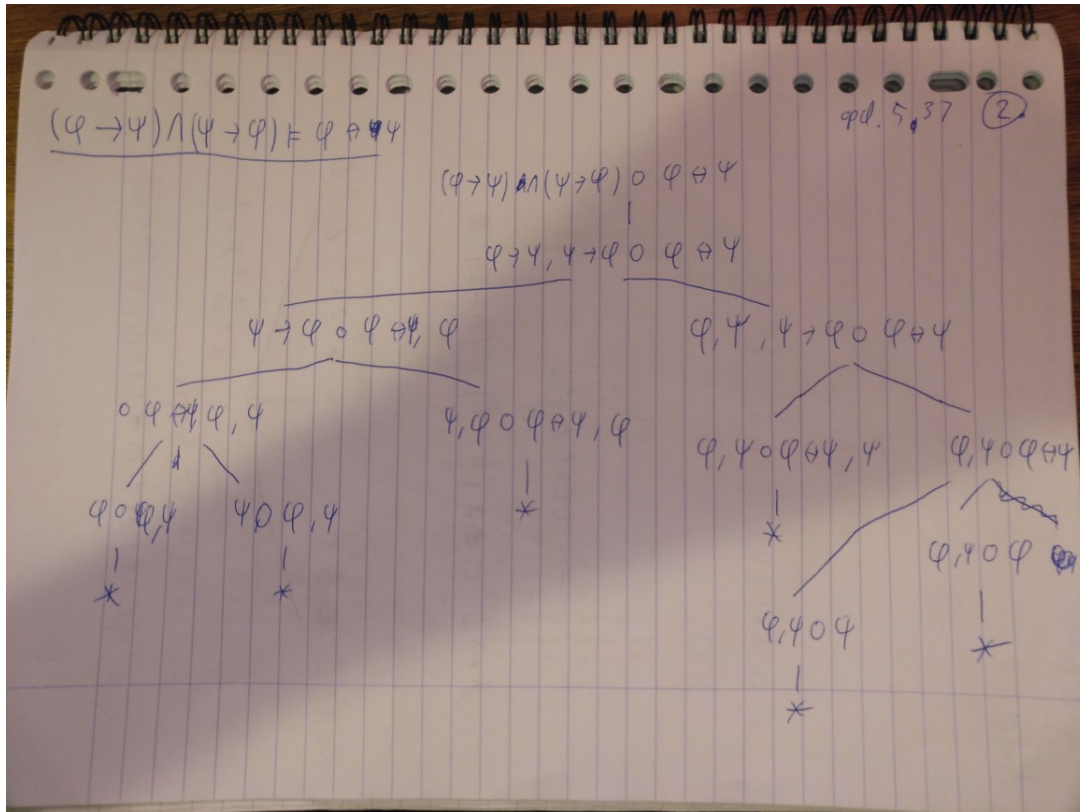
3.

Opgave 5.33

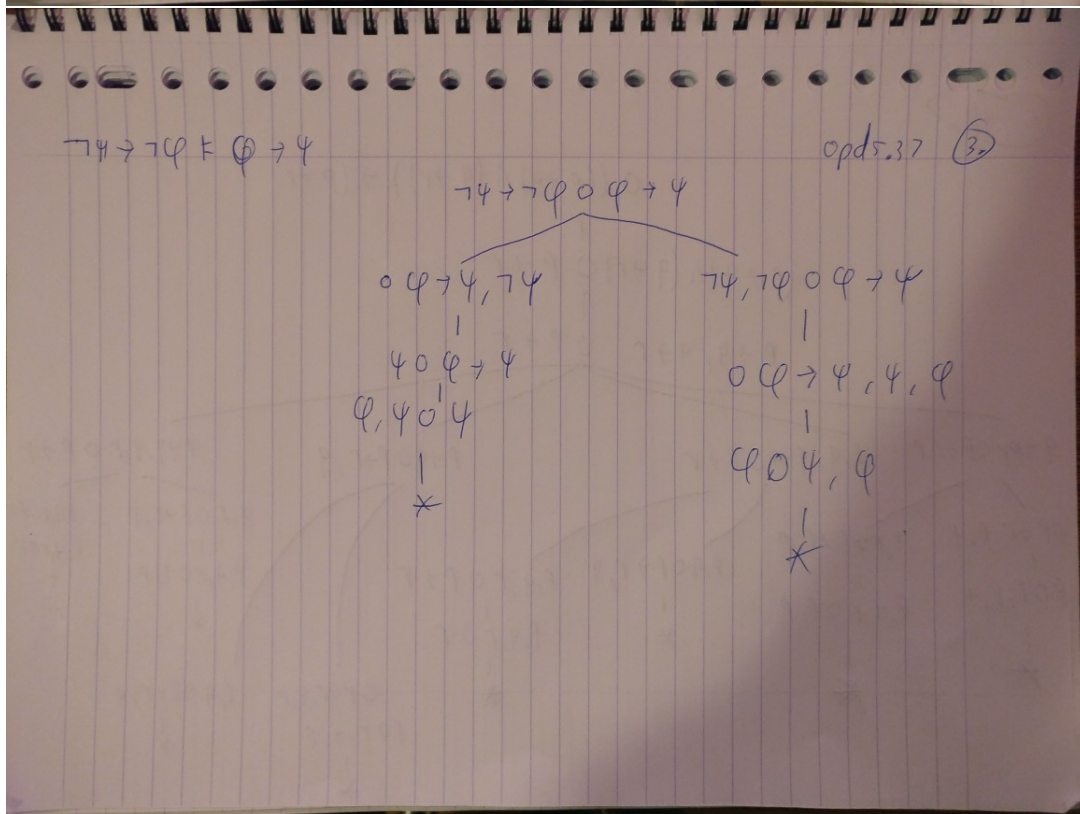
$$2. \phi \vee (\psi \wedge \chi) \models (\phi \vee \psi) \wedge (\phi \vee \chi)$$



Opgrave 5.37



2.



3.