

1:	$(E \vee F) \wedge (E \vee G)$	premise
2:	$E \vee F$	\wedge elim 1
3:	$E \vee G$	\wedge elim 1
4:	E	assumption
5:	$E \vee (F \wedge G)$	\vee intro 4
6:	F	assumption
7:	E	assumption
	...	
8:	$E \vee (F \wedge G)$	
9:	G	assumption
	...	
10:	$E \vee (F \wedge G)$	
11:	$E \vee (F \wedge G)$	\vee elim 3,7–8,9–10
12:	$E \vee (F \wedge G)$	\vee elim 2,4–5,6–11