

How not to do PC

(q) Everyone likes John, John likes no-one but Jack \vdash John = Jack.

1	$\forall x \text{ likes}(x, \text{John})$	premise
2	$\forall y (\text{likes}(\text{John}, y) \rightarrow y = \text{Jack})$	premise
3	$\neg(\text{John} = \text{Jack})$	asm
4	$\text{likes}(\text{John}, \text{John})$	$\forall E(1)$
5	$\text{likes}(\text{John}, \text{John}) \rightarrow \text{John} = \text{Jack}$	$\forall E(2)$
6	$\text{John} = \text{Jack}$	$\rightarrow E(4, 5)$
9	\perp	$\neg E(3, 6)$
10	$\text{John} = \text{Jack}$	$PC(3 - 9)$