Inference at $*$ 3 1
 of proof for Lemma symmetrized_preorder:

1. T : Type
2. R : $T \to T \to \mathbb{P}$
3. Refl(T;x,y.$R(x,y)$)
4. $\forall a$, b, c:T. $R(a,b) \Rightarrow R(b,c) \Rightarrow R(a,c)$
5. a : T
6. b : T
7. c : T
8. $R(a,b)$
9. $R(b,a)$
10. $R(b,c)$
11. $R(c,b)$

$\vdash R(a,c)$

 by ((FHyp 4 [8;10])
 CollapseTHEN ((Auto_aux (first_nat 1:n) ((first_nat 1:n
 ),(first_nat 4:n)) (first_tok :t) inil_term)))·

 .

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http://www.nuprl.org/FDLcontent/p0_942988_/p121_81528_{symmetrized_preorder}3_1.html