

Inference at \* 3 2  
of proof for Lemma symmetrized\_preorder:

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1. T : Type
2. R : T → T → ℙ
3. Refl(T;x,y.R(x,y))
4. ∀a, b, c:T. R(a,b) ⇒ R(b,c) ⇒ 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)
⊢ R(c,a)
  by ((FHyp 4 [9;11])
    CollapseTHEN ((Auto_aux (first_nat 1:n) ((first_nat 1:n
      ),(first_nat 4:n)) (first_tok :t) inil_term))))

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