

Inference at * 3 1
of proof for Lemma squash_thru_equiv_rel:

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1. T : Type
2. E : T → T →  $\mathbb{P}$ 
3. ( $\forall a:T. E(a,a)$ ) & ( $\forall a, b:T. E(a,b) \Rightarrow E(b,a)$ ) & ( $\forall a, b, c:T. E(a,b) \Rightarrow E(b,c) \Rightarrow E(a,c)$ )
4. a : T
5. b : T
6. c : T
7. E(a,b)
8. E(b,c)
 $\vdash E(a,c)$ 
  by ((Sel 3 (FwdThruHyp 3 [7;8]))
  CollapseTHEN ((Auto_aux (first_nat 1:n) ((first_nat
    1:n),(first_nat 4:n)) (first_tok :t) inil_term)))·
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