

Inference at * 1 2 1 1 1 1
of proof for Lemma all_quot_elim:

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1. T : Type
2. E : T → T →  $\mathbb{P}$ 
3. EquivRel(T;x,y.E(x,y))
4. F : (x,y:T // (E(x,y))) →  $\mathbb{P}$ 
5.  $\forall w:(x,y:T // (E(x,y))). (\downarrow(F(w))) \Rightarrow (F(w))$ 
6.  $\forall z:T. F(z)$ 
7. a : T
8. b : T
9. E(a,b)
 $\vdash F(a)$ 
  by ((BackThruHyp 6)
    CollapseTHEN ((Auto_aux (first_nat 1:n) ((first_nat 1:n
      ),(first_nat 4:n)) (first_tok :t) inil_term))))
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