

Inference at * 1 1
of proof for Lemma dep_ax_choice:

1. $A : \text{Type}$
2. $B : A \rightarrow \text{Type}$
3. $Q : x:A \rightarrow B(x) \rightarrow \text{Type}$
4. $x:A \rightarrow y:B(x) \times Q(x,y)$

$$\vdash \exists f: x:A \rightarrow B(x). (\forall x:A. Q(x, f(x)))$$

by ((((((With $\lambda z.(g(z)).1$ (D 0))
CollapseTHENM (D 0)).)
CollapseTHENM (Reduce 0)).)

CollapseTHENA ((Auto_aux (first_nat 1:n) ((first_nat 1:n),(first_nat 3:n
)) (first_tok :t) inil_term)))·

1:

5. $x : A$

$$\vdash Q(x, (g(x)).1)$$

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