

Inference at * 1 1 1
of proof for Lemma `bij_imp_exists_inv`:

1. $A : \text{Type}$
2. $B : \text{Type}$
3. $f : A \rightarrow B$
4. $\forall a_1, a_2 : A. (f(a_1) = f(a_2)) \Rightarrow (a_1 = a_2)$
5. $\exists f_1 : B \rightarrow A. (\forall b : B. f(f_1(b)) = b)$

 $\vdash \exists g : B \rightarrow A. \text{InvFuns}(A; B; f; g)$
by (New ['g'] (D 5))

1:

5. $g : B \rightarrow A$
6. $\forall b : B. f(g(b)) = b$

 $\vdash \exists g : B \rightarrow A. \text{InvFuns}(A; B; f; g)$
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