

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

1. $A : \text{Type}$
2. $B : \text{Type}$
3. $f : A \rightarrow B$
4. $\text{Bij}(A;B;f)$
 $\vdash \exists g:B \rightarrow A. \text{InvFuns}(A;B;f;g)$
by ((Repeat (Unfolds “biject inject surject“ 4))
CollapseTHEN (D 4)).

1:

4. $\forall a_1, a_2:A. (f(a_1) = f(a_2)) \Rightarrow (a_1 = a_2)$
5. $\forall b:B. \exists a:A. (f(a) = b)$
 $\vdash \exists g:B \rightarrow A. \text{InvFuns}(A;B;f;g)$
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