

Inference at * 1 1
of proof for Lemma fun_with_inv_is_bij:

1. $A : \text{Type}$
2. $B : \text{Type}$
3. $f : A \rightarrow B$
4. $g : B \rightarrow A$
5. $(g \circ f) = \text{Id}\{A\}$
6. $(f \circ g) = \text{Id}\{B\}$

$\vdash \text{Bij}(A;B;f)$

by (((Repeat (Unfolds “biject inject surject“ 0))
CollapseTHEN (GenUnivCD)).)

CollapseTHEN ((Auto_aux (first_nat 1:n) ((first_nat 1:n),(first_nat 3:n)) (first_tok
:t) inil_term))).

1:

7. $a_1 : A$
 8. $a_2 : A$
 9. $f(a_1) = f(a_2)$
- $\vdash a_1 = a_2$

2:

7. $b : B$
- $\vdash \exists a:A. (f(a) = b)$

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