

Inference at \* 1 1 1

of proof for Lemma add\_functionality\_wrt\_lt:

....assertion.... NILNIL

1.  $i_1 : \mathbb{Z}$

2.  $i_2 : \mathbb{Z}$

3.  $j_1 : \mathbb{Z}$

4.  $j_2 : \mathbb{Z}$

5.  $i_1 < j_1$

6.  $i_2 \leq j_2$

$\vdash (i_1 + 1 + i_2) \leq (j_1 + j_2)$

by ((BackThruLemma 'add\_functionality\_wrt\_le')

CollapseTHEN ((Auto\_aux (first\_nat 1:n

) ((first\_nat 2:n),(first\_nat 3:n)) (first\_tok :t) inil\_term)))·

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