

Inference at \* 2 2  
of proof for Lemma select\_nth\_tl:

1.  $T$  : Type
2.  $T$  List
3.  $u$  :  $T$
4.  $v$  :  $T$  List
5.  $\forall n:\{0.. \|v\|\}, i:\{0..(\|v\| - n)^-\}. \text{nth\_tl}(n;v)[i] = v[(i+n)]$
6.  $n$  :  $\{0.. \|v\|+1\}$
7.  $i$  :  $\{0..(\|v\|+1) - n\}^-$
8.  $0 < n$

$\vdash \text{nth\_tl}(n - 1;v)[i] = [u / v][(i+n)]$   
by ((RWO "5" 0)  
CollapseTHEN ((Auto\_aux (first\_nat 1:n) ((first\_nat 2:n),(first\_nat 3:n)) (first\_tok SupInf:t) inil\_term))).

1:

$$\vdash v[(i+(n - 1))] = [u / v][(i+n)]$$

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