

Inference at * 2 2 2 1
of proof for Lemma member_nth_tl:

1. $T : \text{Type}$
 2. $n : \mathbb{Z}$
 3. $0 < n$
 4. $\forall x:T, L:(T \text{ List}). (x \in \text{nth_tl}(n - 1;L)) \Rightarrow (x \in L)$
 5. $x : T$
 6. $T \text{ List}$
 7. $u : T$
 8. $v : T \text{ List}$
 9. $(x \in \text{nth_tl}(n;v)) \Rightarrow (x \in v)$
 10. $0 < n$
 11. $(x \in \text{nth_tl}(n - 1;v))$
- $\vdash (x \in [u / v])$
by ((RWO "cons_member" 0)
CollapseTHEN (Auto.)).

1:

$$\vdash (x = u) \vee (x \in v)$$