

Inference at *
of proof for Lemma nth_tl_append:

$\vdash \forall T:\text{Type}, as, bs:(T \text{ List}). \text{nth_tl}(\|as\|; as @ bs) \sim bs$
by ((InductionOnList)
CollapseTHEN (Reduce 0)).

1:

1. $T : \text{Type}$
2. $T \text{ List}$
- $\vdash \forall bs:(T \text{ List}). bs \sim bs$

2:

1. $T : \text{Type}$
2. $T \text{ List}$
3. $u : T$
4. $v : T \text{ List}$
5. $\forall bs:(T \text{ List}). \text{nth_tl}(\|v\|; v @ bs) \sim bs$
- $\vdash \forall bs:(T \text{ List}). \text{nth_tl}(\|v\|+1; [u / (v @ bs)]) \sim bs$