

Inference at * 1 1 1 1
of proof for Lemma before-hd:

1. $T : \text{Type}$
 2. $L : T \text{ List}$
 3. $0 < \|L\|$
 4. $\text{no_repeats}(T;L)$
 5. $x : T$
 6. $x \text{ before } \text{hd}(L) \in L$
 7. $\forall x, y:T. x \text{ before } y \in L \Rightarrow (\neg(x = y))$
 8. $\neg(x = \text{hd}(L))$
 9. $\text{hd}(L) \text{ before } x \in L$
 10. $x \text{ before } x \in L$
 11. $\neg(x = x)$
- $\vdash \text{False}$
by ((D (-1))
CollapseTHEN (Auto·)).