

Inference at * 1 3
of proof for Lemma nat_ind.a:

1. $P : \mathbb{N} \rightarrow \mathbb{P}\{k\}$
2. $P(0)$
3. $\forall i:\mathbb{N}^+. P(i - 1) \Rightarrow P(i)$
4. $i : \mathbb{Z}$
5. $0 < i$
6. $((i - 1) \geq 0) \Rightarrow P(i - 1)$
7. $i \geq 0$

$\vdash P(i)$
by (((BHyp 3)
CollapseTHENM (BHyp 6)).)
CollapseTHEN ((Auto_aux (first_nat 1:n
) ((first_nat 2:n),(first_nat 3:n)) (first_tok :t) inil_term))).