Inference at $*$ 1 2 2 2 1
 of proof for Lemma mul_cancel_in_eq:

. . . . .set predicate. . . . . NILNIL

1. $a : \mathbb{Z}$
2. $b : \mathbb{Z}$
3. $n : \mathbb{Z}^{-\circ}$
4. $\forall m{:}\mathbb{N}^{+}.\ ((m * a) = (m * b)) \Rightarrow (a = b)$
5. $(n * a) = (n * b)$
6. $\neg(n > 0)$
7. $((\text{-}n) * (\text{-}a)) = ((\text{-}n) * (\text{-}b))$

$\vdash 0 < (\text{-}n)$

 by ((((OnHyps [7;5] Thin)
 CollapseTHEN (SupInf))·)
 CollapseTHEN (
  (Auto_aux (first_nat 1:n) ((first_nat 1:n),(first_nat 3:n)) (first_tok :t) inil_term)))·

  .