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

. . . . .upcase. . . . . NILNIL

1. $a : \mathbb{Z}$
2. $b : \mathbb{Z}$
3. $a \leq b$
4. $n : \mathbb{Z}$
5. $0 < n$
6. $((n - 1) * a) \leq ((n - 1) * b)$

$\vdash (n * a) \leq (n * b)$
 by ((Assert $(((n - 1) * a)+a) \leq (((n - 1) * b)+b)$)
 CollapseTHENM ((Auto_aux (first_nat 1:n) ((first_nat 2:n),(first_nat
 3:n)) (first_tok :t) inil_term)))·

 1: . . . . .assertion. . . . . NILNIL

 $\vdash (((n - 1) * a)+a) \leq (((n - 1) * b)+b)$
 .