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

. . . . .assertion. . . . . NILNIL

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

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

 by ((BackThruLemma ‘add_functionality_wrt_le‘)
 CollapseTHEN ((Auto_aux (first_nat 1:n
) ((first_nat 1:n),(first_nat 3:n)) (first_tok :t) inil_term)))·

 .

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http://www.nuprl.org/FDLcontent/p0_942988_/p121_75390_{mul_preserves_le}1_2_1.html