

Inference at * 1
of proof for Lemma mul_preserves_le:

1. $a : \mathbb{Z}$

2. $b : \mathbb{Z}$

3. $n : \mathbb{N}$

4. $a \leq b$

$\vdash (n * a) \leq (n * b)$

by ((NInd 3)

CollapseTHENA ((Auto_aux (first_nat 1:n) ((first_nat 2:n),(first_nat 3:n
)) (first_tok :t) inil_term))).

1:basecase..... NILNIL

3. $a \leq b$

$\vdash (0 * a) \leq (0 * b)$

2:upcase..... NILNIL

3. $a \leq b$

4. $n : \mathbb{Z}$

5. $0 < n$

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

$\vdash (n * a) \leq (n * b)$

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