Inference at $*$ 1
 of proof for Lemma add_cancel_in_le:

1. $a : \mathbb{Z}$
2. $b : \mathbb{Z}$
3. $n : \mathbb{Z}$
4. $(a+n) \leq (b+n)$

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

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

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