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

1. $i : \mathbb{Z}$
$\vdash$(if 0 $\leq$z i then i else -i fi = 0) $\Longleftrightarrow$ (i = 0)
by InteriorProof ((((BoolCasesOnCExp 0 $\leq$z i)
CollapseTHENM (AbReduce 0))$\cdot$)

CollapseTHENA ((Auto_aux (first_nat 1:n) ((first_nat 1:n),(first_nat 3:n)) (first_tok :t) inil_term)))$\cdot$

1:

2. 0 $\leq$ i
$\vdash$ (i = 0) $\Longleftrightarrow$ (i = 0)

2:

2. i < 0
$\vdash$ ((-i) = 0) $\Longleftrightarrow$ (i = 0)

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