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

1. $a : \mathbb{Z}$
2. $b : \mathbb{Z}$
3. $(a * b) > 0$
4. $a < 0$

$\vdash((a > 0)\ \&\ (b > 0)) \vee ((a < 0)\ \&\ (b < 0))$
 by ((Sel 2 (D 0))
 CollapseTHEN ((Auto_aux (first_nat 1:n) ((first_nat 1:n),(first_nat
 3:n)) (first_tok :t) inil_term)))·

 1:

 $\vdash b < 0$
 .