

Inference at * 1
of proof for Lemma neg_mul_arg_bounds:

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1. a : ℤ
2. b : ℤ
3. (((-a) * b) > 0) ⇔ ((((-a) > 0) & (b > 0)) ∨ (((-a) < 0) & (b < 0)))
⊢ ((a * b) < 0) ⇔ (((a < 0) & (b > 0)) ∨ ((a > 0) & (b < 0)))
  by InteriorProof ((ReplaceWithEqv (TryC (HigherC IntSimpC))
    ((-(a * b)) > (-0))
    ⇔ ((((-a) > (-0)) & (b > 0)) ∨ (((-a) < (-0)) & (b < 0)))
  3)

```

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

1:

```

3. (((-(a * b)) > (-0)) ⇔ ((((-a) > (-0)) & (b > 0)) ∨ (((-a) < (-0)) & (b < 0)))
⊢ ((a * b) < 0) ⇔ (((a < 0) & (b > 0)) ∨ ((a > 0) & (b < 0)))
.

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