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

1. $i : \mathbb{Z}$
2. $j : \mathbb{Z}$
3. $i <\text{z } j \sim \text{ff}$

$\vdash \neg(i < j)$

```
  by (\p. let x, y = dest_sqequal (h (-1) p) in
         (Assert (
  mk_equal_term bool_term y y)
            THENL [(Auto_aux (first_nat 1:n) ((first_nat 1:n
  ),(first_nat 3:n)) (first_tok :t) inil_term); SqSubstAtAddr [2] x (-1)

                        THENL [(Auto_aux (first_nat 1:n) ((first_nat 1:n),(first_nat 4:n
  )) (first_tok :t) inil_term); Id]]) p)
```

1:

4. $i <\text{z } j = \text{ff}$

$\vdash \neg(i < j)$

.