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

. . . . .truecase. . . . . NILNIL

1. A : Type
2. x : A
3. y : A
4. P : $A \rightarrow \mathbb{P}$
5. i : $\mathbb{Z}$
6. j : $\mathbb{Z}$
7. $P(x)$
8. $i = j$

$\vdash P(\text{if } (i =_0 j) \text{ then } x \text{ else } y \text{ fi })$
 by ((EqIntCases 0)
 CollapseTHEN ((Auto_aux (first_nat 1:n) ((first_nat 2:n
 ),(first_nat 3:n)) (first_tok :t) inil_term)))·

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