

Inference at \*  
of proof for Lemma decidable\_int\_equal:

$\vdash \forall i, j : \mathbb{Z}. \text{Dec}(i = j)$   
by (((RepD)  
CollapseTHENM (UnfoldTopAb 0)).)  
CollapseTHENA ((Auto\_aux (first\_nat  
1:n) ((first\_nat 1:n), (first\_nat 3:n)) (first\_tok :t) inil\_term))).

1:

1.  $i : \mathbb{Z}$
  2.  $j : \mathbb{Z}$
- $\vdash (i = j) \vee (\neg(i = j))$

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