

Inference at * 1 2
of proof for Lemma decidable_and:

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1.  $P : \mathbb{P}$ 
2.  $Q : \mathbb{P}$ 
3.  $\neg P$ 
4.  $Q$ 
 $\vdash (P \ \& \ Q) \vee (\neg(P \ \& \ Q))$ 
  by InteriorProof (((DNth 2 0)
    CollapseTHENM (D 0)).)
    CollapseTHEN (
      (Auto_aux (first_nat 1:n) ((first_nat 1:n),(first_nat 3:n)) (first_tok
        :t) inil_term))).

```