

Inference at * 1 1
of proof for Lemma iff_preserves_decidability:

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1. A :  $\mathbb{P}$ 
2. B :  $\mathbb{P}$ 
3. A
4. A  $\iff$  B
 $\vdash B \vee (\neg B)$ 
  by (((DNth 1 0)
    CollapseTHENM (BackThruHyp 4)).)
CollapseTHEN (
  (Auto_aux (first_nat 1:n) ((first_nat 1:n),(first_nat 3:n)) (first_tok :t) inil_term))).
.
```