

Inference at * 1 3
of proof for Lemma decidable_or:

1. $P : \mathbb{P}$
2. $Q : \mathbb{P}$
3. $\neg P$
4. Q

$\vdash (P \vee Q) \vee (\neg(P \vee Q))$
by (((DNth 1 0)
CollapseTHENM (DNth 2 0)).)
CollapseTHEN ((Auto_aux (first_nat 1:n
) ((first_nat 1:n),(first_nat 3:n)) (first_tok :t) inil_term))).