

Inference at \* 1 2 0  
of proof for Lemma decidable\_and:

1.  $P : \mathbb{P}$   
2.  $Q : \mathbb{P}$   
3.  $\neg P$   
4.  $Q$   
 $\vdash (P \wedge Q) \vee (\neg(P \wedge Q))$   
by PERMUTE{1:n, 2:n, 2:n}

1:

5.  $P \wedge Q$   
 $\vdash \text{False}$   
2: .....wf..... NILNIL

$\vdash (P \wedge Q) \in \mathbb{P}$

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