

Inference at \*  
of proof for Lemma or\_assoc:

$\vdash \forall A, B, C: \mathbb{P}. (A \vee B \vee C) \iff ((A \vee B) \vee C)$   
by (((RepD  
CollapseTHENM (ProveProp)).)  
CollapseTHENA ((Auto\_aux (first\_nat 1:n  
 ) ((first\_nat 1:n),(first\_nat 3:n)) (first\_tok :t) inil\_term))).