

Inference at *
of proof for Lemma comp_assoc:

$\vdash \forall A, B, C, D:\text{Type}, f:(A \rightarrow B), g:(B \rightarrow C), h:(C \rightarrow D). (h \circ (g \circ f)) = ((h \circ g) \circ f)$
by (((UnivCD)
CollapseTHENM (((Unfold 'compose' 0)
CollapseTHEN (Reduce 0)).)).)

CollapseTHENA ((Auto_aux (first_nat 1:n) ((first_nat 1:n),(first_nat 3:n)) (first_tok
:t) inil_term))).

1:

1. $A : \text{Type}$
 2. $B : \text{Type}$
 3. $C : \text{Type}$
 4. $D : \text{Type}$
 5. $f : A \rightarrow B$
 6. $g : B \rightarrow C$
 7. $h : C \rightarrow D$
- $\vdash (\lambda x. h(g(f(x)))) = (\lambda x. h(g(f(x))))$