

Inference at \* 1  
of proof for Lemma comp\_assoc:

```
1. A : Type
2. B : Type
3. C : Type
4. D : Type
5. f : A → B
6. g : B → C
7. h : C → D
⊢ (λx.h(g(f(x)))) = (λx.h(g(f(x))))
  by (Auto_aux (first_nat 1:n) ((first_nat 1:n),(first_nat 3:n)) (first_tok :t) inil_term)

.
```