```
lang_union_assoc  THM

⊢  ∀L,M,N:LangOver(Alph). (L U (M U N)) = ((L U M) U N)
  by Unfold ‘languages‘ 0 THEN Unfold ‘lang_eq‘ 0
     THEN
     Unfold ‘lang_union‘ 0
     THEN
     UnivCD
     THEN
     Reduce 0
     THEN
     ProveProp
END
```