LISP FUNCTION PROOFS ASSIGNMENT

1. Prove that the definition of APPEND is associative. In other words, 
   APPEND(x,APPEND(y,z)) ≡ APPEND(APPEND(x,y),z). [Hint: use induction on the 
   length of the list bound to x.]

2. Show how the FLAT function can be transformed to yield the FLAT2 function using the 
   transformations we described for adding an accumulator variable and thereby making 
   the function be tail recursive.