Homework till the 10th of May

1. Let us fix two regular expressions E and F. Show using the axiomatic semantics that $E = F$ implies $F = E$ and $E^* = F^*$.

2. Decide by giving a proof or a counterexample whether
   $\langle$while b do $S, s\rangle$
   and
   $\langle$if b then $(S;$ while b do $S)$ else skip$, s\rangle$
   are semantically equivalent in natural and operational semantics.