



Observations and General Comments Regarding Assignment 2

Not all of these remarks apply to everyone, but many apply to many people.

- 1. A continued lack of precision.** In general, the “proofs” are not proofs. I will remind everyone that a proof must be a sequence of statements, each of which is either given as true, or that follow from preceding statements by logical implication and nothing else. Some of the so-called proofs were statements like “language L has property p_1 and property p_2 , and so does L_2 , so they must be the same.” or “(it is self-evident that) both expressions define A^* so they have to be the same.”
- 2. Forgetting that set equality proofs require two parts. ALWAYS.** There were still many homeworks where people wrote something like, “pick a w in L since w is also in R it follows that $L = R$.”
- 3. Misusing language.** You cannot say things like, “let S^* be the null string” because sets are not words. You cannot say that b^* is in L because b^* is a regular expression and L is a language.