A, B, C, E, F. Do Problems A, B, C, E, and F from the Recursion tutorial on the course web site. (Four of these five problems are quite short.) Hand in your solution in your hand-in folder on the COURSES file server.

You do NOT need to hand in Problem D or Problem G from the tutorial, although they might also benefit your computer science education.

H. Prove that the intersection of a context-free language and a regular language is a context-free language. Hint: What other proofs about intersection have we done in this course?

I. Show that if A is context-free and B is regular, then A/B is context-free. Hint: Let P be a PDA for A and M a DFA for B. Build a new PDA N that is able to run P and M simultaneously. Then, use P and N in the construction of a PDA for A/B. Various tweaks are required. My solution uses many ϵ-transitions.