${\bf CSci~3501~Assignment~9} \\ {\bf Due~Tuesday,~November~15th~in~my~office}$

Problem 1 (9 points). Sipser, exercise 2.16 p. 129. In other words, given two context-free grammars G_1, G_2 that derive languages L_1, L_2 , repsectively, show how to construct context-free grammars for the languages $L_1 \cup L_2$, $L_1 \circ L_2$, and L_1^* . Alternatively you can start with two PDAs and construct PDAs for the required languages.

Problem 2 (6 points). Sipser, exercises 2.30a, 2.31 p. 131.