

Homework 5

Due Friday, May 18, 2001

1. [7 points] 2.9.
2. [8 points] Give a formal description of a PDA that accepts the language in exercise 2.9. [Note: follow the construction given in class to go from a CFG to an equivalent PDA.]
3. [10 points] 2.16.
4. [10 points] 2.17(a).
5. (don't turn in) 2.19.
6. [15 points] 2.20.
7. [10 points] Prove that context-free languages are closed under reversal. That is, for any context-free L , L^R is also context-free. **Note:** If you provide a grammar G for L^R , I insist on a complete proof that $L(G) = L^R$.