Problem Set 2 – revised version

Please turn in each problem on a separate page with your name.

1. Book, 2.32 .   [proving non–CFL]
   (Note that the result of this problem demonstrates that the class of CFLs isn't closed under either complement or intersection. Check that you understand why.)

2. Book, 3.12 .   [left reset TM]   NOTE: Changed from earlier version.

3. Book, 3.18 .   [decidable iff enumerable in lex order]

4. Book, 4.17 .   [projection of decidable iff T-recognizable]

5. Book, 4.22 .   [useless states in a PDA]

6. Book, 4.25 .   [decidable DFA problem]

7.* Book, 2.22 .   [tricky CFL]