Problem Set 2 – revised version

- 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]
- $7.^{\star}$ Book, 2.22 . [tricky CFL]

18.404J / 18.4041J / 6.840J Theory of Computation $\ensuremath{\mathsf{Fall}}$ 2020

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