

COSC 4111/5111 — Winter 2013

Posted: Feb 23, 2013

Due: TBA—three weeks minimum

Problem Set No. 2

NB. *All problems are equally weighted out of 5.* The problem set list for grad students is the entire list here. Undergrads should omit the problems (*if any*) marked “Grad”. If they wish to do some of those for extra credit the extra credit will be applied on an “all or nothing” basis. That is, **no part marks will be given** for a “Grad” problem attempted by undergrads.



This is not a course on *formal* recursion theory. Your proofs should be informal (but \neq sloppy), correct, and informative (and if possible short). Please do not trade length for correctness or readability.



Most problems are from “Theory of Computation”.

- (1) Do Exercises 2.5.0.15 (p.163), 2.5.0.30 (p.171) and 2.6.0.33 and 2.6.0.34 (p.173).
- (2) From Section 2.12 (p.234 and onwards) do: 20, 22, 26, 29, 36, 42.
- (3) From Section 2.12 (p.237 and onwards) do: 44, 49, 52, 54 **without Rice’s Theorem!**