

CSC 2125, Fall 2006
Homework 1
Bring solutions to class on Oct. 3

September 26, 2006

1. Consider the RHS Tabulation Algorithm from Figure 3 of [RHS95]. Suppose we are processing the path edge $\langle s_p, g \rangle \rightarrow \langle e_p, g \rangle$, and assume that no summary edges have yet been generated. What new summary edges does the algorithm generate? For what edges is `Propagate()` called on line [27]? Does this agree with Figure 2?
2. Let $D = a, b, c$, and let $f(X) = D - X$.
 - What is the representation function of f ?
 - Is $[[R_f]] = f$? Show why or why not.
3. Prove **Theorem 3.3** of [RHS95]; that is, show that for any function f which distributes over \cup ,
$$[[R_f]] = f$$
4. Exercise 2.16 of NNH.