

CS 341, Spring 2008
Solutions for Quiz 1, Day Section

1. (a) $\varepsilon, bb, abb, bab, bba, aabb$
- (b) A is not closed under concatenation. For example, the strings $bb \in A$ and $abb \in A$, but their concatenation $bbabb \notin A$ since $n_b(bbabb) = 4$ and $4 \bmod 3 = 1 \neq 2$.
- (c) A DFA for A is below:

