Name: ______________________________ Student ID:

Math 166 - Theory of Computability - Fall 1999

Quiz #3 — October 21

1. Draw the state diagram of a DFA which recognizes the language

$$L_1 = \{w \in \{a,b,c\}^* : w \text{ contains } ab \text{ or } ac \text{ as a substring}\}.$$

2. Draw the state diagram of a NFA which recognizes the language

$$L_2 = \{w \in \{a,b\} : |w| \geq 2 \text{ and } w \text{ has } a \text{ as its next-to-last symbol}\}.$$