

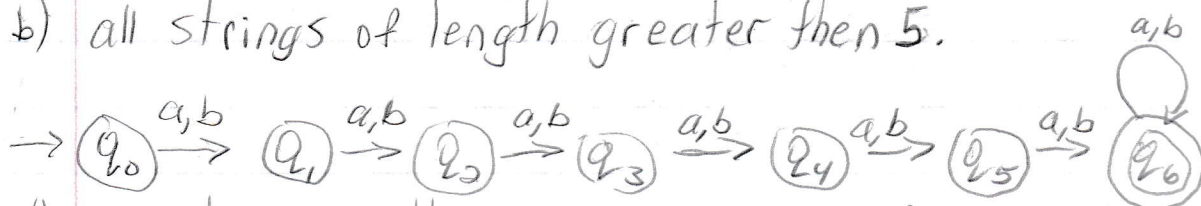
## Module #2 HW

1. Which of the strings 0001, 01101, 00001101 are accepted by the DFA in Figure 2.1?

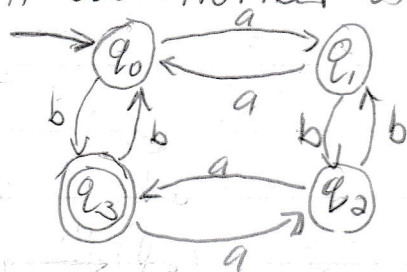
• all 3 strings are accepted

3. For  $\Sigma = \{a, b\}$ , construct DFA's that accept the sets consisting of

b) all strings of length greater than 5.

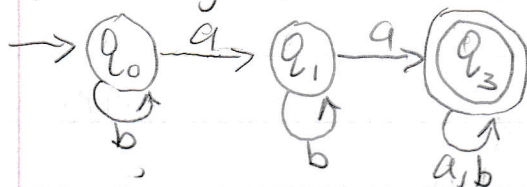


d) all strings with an even number of a's and an odd number of b's.



4. For  $\Sigma = \{a, b\}$ , construct DFA's that accept the sets consisting of

b) all strings with at least two a's.



14. show that  $L = \{a^n : n \geq 3\}$  is regular

