1 Test 1 Review

1.1 AFSA

Question 1:

a) Design a AFSA for $x \in \{0,1\}^*$ — x has a 0 fourth from the end and x represents in binary an integer evenly divisible by 3

b) Construct the computation tree for m on 10101

Question 2:

a) Design a AFSA for $x \in \{0,1\}^*$ — x does not have a 0 fourth from the end and x represents in binary an integer that doesn't evenly divisible by 3

b) Computation tree for m on 10101

Question 3:

a) Design AFSA $L = \{x \in \{0,1\}^*\}$, x represents in binary evenly divisible by 15.

b) Design $L_2 = L_1^{'}$

Question 4:
Let $\overline{M_1} = \{x \in \{0,1\}^*\}$ / x begins or ends with 00
Let $M_2 = \{x \in \{0,1\}^*\}$ / x has both 00 and 11 as substring

a) Design AFSA $M_3 = M_1 \cap M_2$.
b) Design AFSA $M_4 = M_1 \cup \bar{M_2}$
c) Design AFSA $M_5 = \bar{M_3}$

Question 5:
Convert the AFSA to DFSA

M	0	1
1	2∧3	1
2		
3		
4		

1.2   Another subtitle

More plain text.