

## Homework 8 (CS/Math 385)

due October 31, 2018

Universal Rule for all homework: Unless otherwise stated, all solutions must include a brief proof that they are correct. For problems that involve following a procedure we have discussed in class, showing the steps you took and giving an indication of what was done at each step (for example writing that “State  $q_3$  was removed to obtain the following equivalent super-NFA.”) suffices to satisfy the rule.

Section 7.2: 15

Section 7.3: 2, 3

Section 8.2: 3, 7, 17

You may use facts we proved in class without proving them again.