$\begin{array}{c} Homework \ 3 \ (CS/Math \ 385) \\ \text{due October } 3, \ 2018 \end{array}$

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 4.3: 4d, 4f, 5d, 10b, 15c, 15f, 24

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