$\begin{array}{c} Homework \ 5 \ (CS/Math \ 385) \\ \text{due October } 12, \, 2018 \end{array}$

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 5.1: 3, 7bce, 8e Section 5.2: 6, 8, 9, 12

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