Homework 10 (**Extra Credit**)
Com S 331, Spring 2017
Due date: **Friday, April 21, 2017**
Please submit the homework via BlackBoard **before midnight**.

Note: All submissions should be **typed** and in .pdf or .doc(x) format. However,
state diagrams can be drawn with hand and presented in the final manuscript as
images. We recommend to use Latex for typing homeworks. You **do not** need
to formally prove the correctness of your constructions unless a question specif-
ically asks to do so. However, in most cases you need to present a reasonable
justification of correctness.

Total points available: 120

0. Please read chapter 4 from the class-book (Sipser, 3rd edition).

1. **(20 points)** Solve Problem 4.11 from the class-book.

2. **(20 points)** Solve Problem 4.17 from the class-book.

3. **(30 points)** Solve Problem 4.26 from the class-book.

4. **(20 points)** Solve Problem 4.28 from the class-book.

5. **(30 points)** Solve Problem 4.30 from the class-book.