EECS210 **Written HW#8** **Due: 12-5-17**

1. (15) Given a function f(n) defined by:
   $f(1) = 1$,
   $f(2) = 5$,
   $f(n) = 2f(n-1) - f(n-2)$, n is an integer > 2.
   Find a solution for f(n) and then prove it by using strong induction as discussed in class.

2. (21) Do Problem 32(a)-(g) on Page 397. You must give integer solution and show your calculation clearly for credit.

3. (12) Do Problem 46 on Page 397. You must show your calculation clearly for credit.

4. (6) Do Problem 4 on Page 405. You must show your calculation clearly for credit.

5. (10) Do Problem 14 on Page 405. You must show your calculation clearly for credit.

6. (12) Do Problem 18 on Page 413. You must show your calculation clearly for credit.

7. (24) Do Problem 22 on Page 414. You must show your calculation clearly for credit.