

## DISCRETE MATHEMATICS

### HOMEWORK 7

- (1) Solve the recurrence relation  $a_0 = a$ ,  $4a_{n+1} = 5a_n$ .
- (2) Solve the recurrence relation  $a_0 = 1$ ,  $a_1 = 3$ ,  $a_n = 5a_{n-1} + 6a_{n-2}$ .
- (3) Solve the recurrence relation  $a_0 = 2$ ,  $a_1 = -8$ ,  $2a_{n+2} - 11a_{n+1} + 5a_n = 0$ .
- (4) Solve the recurrence relation  $a_0 = 1$ ,  $a_1 = 6$ ,  $a_{n+2} = 2a_{n+1} + a_n$ .