

## Exercise #4

(範圍: Recurrence Relations)

1. P. 481: 1 (only for (a), (c) and (d)). (30%)
2. P. 481: 6. (10%)
3. P. 481: 7. (10%)
4. P. 481: 8. (15%)
5. P. 487: 1 (only for (a) and (c)). (20%)
6. Solve  $a_n = 2na_{n-1} + n!$ ,  $a_0 = 2$ . (15%)

**(For each problem, you need to show the detailed computation, not only the answer.)**