General Guidelines: This assignment will NOT be collected, nor graded. There will be NO quiz based on this assignment. However, there will be similar problems in Midterm 2. So you should carefully complete this assignment as if it were to be graded.

The solution will be posted on Oct 31.

1. (0 points). Page 153, Problem 10 and 11.
3. (0 points). Page 153, Prob 20, (a), (b), (c) and (d).
   (Note that $N = \{0, 1, 2, \ldots\}$ is the set of natural numbers.
4. (0 points). Page 153, Prob 22 (b), (c) (d).
5. (0 points). Page 154, Prob 30, (a), (b), (d).
6. (0 points). Page 154, Prob 32.
7. (0 points). Page 154, Prob 36 and 37.
8. (0 points). Page 167, Prob 6 (b), (c), (d), (e). (Note: List the first 6 terms of each sequence.)
9. (0 points). Page 168, Prob 10, (c), (d), (e).
10. (0 points). Page 168, Prob 16, (b), (c), (d), (e).
11. (0 points). Page 168, Prob 18 (b), (c).
12. (0 points). Page 169, Prob 32 (e), (d).
13. (0 points). By using the method discussed in class, prove the following summation formula:

   $$\sum_{i=1}^{n} i^3 = \frac{n^2(n+1)^2}{4}$$

14. (0 points). Page 176, Prob 2 (b), (c), (d), (e), (f).