PMAT 4340 – Combinatorial Analysis — Assignment #7
Fall 2005

Instructions

- Answer each question completely; justify your answers.
- This assignment is due at: 3:00 pm on Wednesday November 16th.

1. Exercise 6.3.15.
2. Exercise 6.3.17, part (b).
3. Exercise 6.4.12.
4. Find an ordinary generating function $G(x) = \sum_{r \geq 0} a_r x^r$ such that
   (a) $a_r = r^3$
   (b) $a_r = 2r - 3$
   (c) $a_r = r(r-1)(r-2)$
5. Find an ordinary generating function $G(x) = \sum_{r \geq 0} a_r x^r$ such that
   (a) $a_r = 5r^2 - \frac{3r}{2}$
   (b) $a_r = (r+2)(r+1)(r)\cdots(r-99)$
6. Exercise 6.5.2.
7. Exercise 6.5.6.
8. Exercise 7.1.4.
9. Exercise 7.1.6.
10. Exercise 7.1.18.
11. Exercise 7.1.36.