
Mathematical Analysis of Algorithms

Homework #7

Due Date:

Reading Assignment: Chapter 7

Problems:

1. 7–11
2. 7–14
3. (a) 7–15
(b) Re-evaluate $P(z)$ by summing Equation (7.49) on m to see if you can get the same result as part (a).
4. 7–16
5. 7–26
6. (a) 7–34
(b) Find the closed form of $G_n(z)$ for $m = 1$.
[**Note**] This technique is called super generating function. Sometimes it is easier to find the closed form of $G_n(z)$ (which in turn is a generating function of some terms with index k) by finding the closed form of its generating function.