

**AM 121: Homework # 7 (Do not hand in)**

The book we refer to is Hillier & Lieberman, *Introduction to Operations Research* (7th Edition).

1. Use Dijkstra's algorithm (or, any other dynamic programming algorithms) to solve for the short path problem for the network in Problem 9.3-3 (a).
2. Problem 11-3.10. This is a resource allocation problem with multiplicative (instead of additive) benefit. Use dynamic programming to write down the DPE. Find the optimal solution.
3. Problem 12.1-2 (a).
4. Problem 12.3-1. Only do the formulation part.
5. Problem 12.3-4 (a).