AM 121: Homework # 5 (Due date Nov 29, Tuesday)

The book we refer to is Hillier & Lieberman, *Introduction to Operations Research* (8th Edition).

1. Problem 10.3-2.

2. 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).

3. A sales representative lives in Bloomington and must be in Indianapolis next Thursday. On each day of the days Monday, Tuesday, and Wednesday, he can sell his wares in Indianapolis, Bloomington, or Chicago. From past experience, he believes that he can earn \$12 from spending a day in Indianapolis, \$16 from spending a day in Bloomington, and \$17 from spending a day in Chicago. Where should he spend the first three days of the week to maximize his sales income less travel costs? Travel costs are shown below

	Indianapolis	Bloomington	Chicago
Indianapolis	–	5	2
Bloomington	5	–	7
Chicago	2	7	–