All solutions should be typed, using Latex preferably.

1. Suppose we have a set of three sellers, labelled as a, b, and c, and a set of three buyers, labelled as x, y, and z. Each seller is offering a distinct house for sale, and the valuations of the buyers are as follows: Buyer x: 3 (for a), 6 (for b), 4 (for c); buyer y: 2 (for a), 8 (for b), 1 (for c); buyer y: 1 (for a), 2 (for b), 3 (for c). Describe what happens, if we run the bipartite-graph auction procedure, by saying what the prices are at the end of each round of the auction, including what the final market-clearing prices are when the auction completes. (Note that there may be multiple constricted set of buyers. You can choose any one. Will the choice matter on the final market-clearing prices?)

   (1) Chapter 7, 2
   (2) Chapter 7, 7
   (3) Chapter 7, 18
   (4) Chapter 7, 45