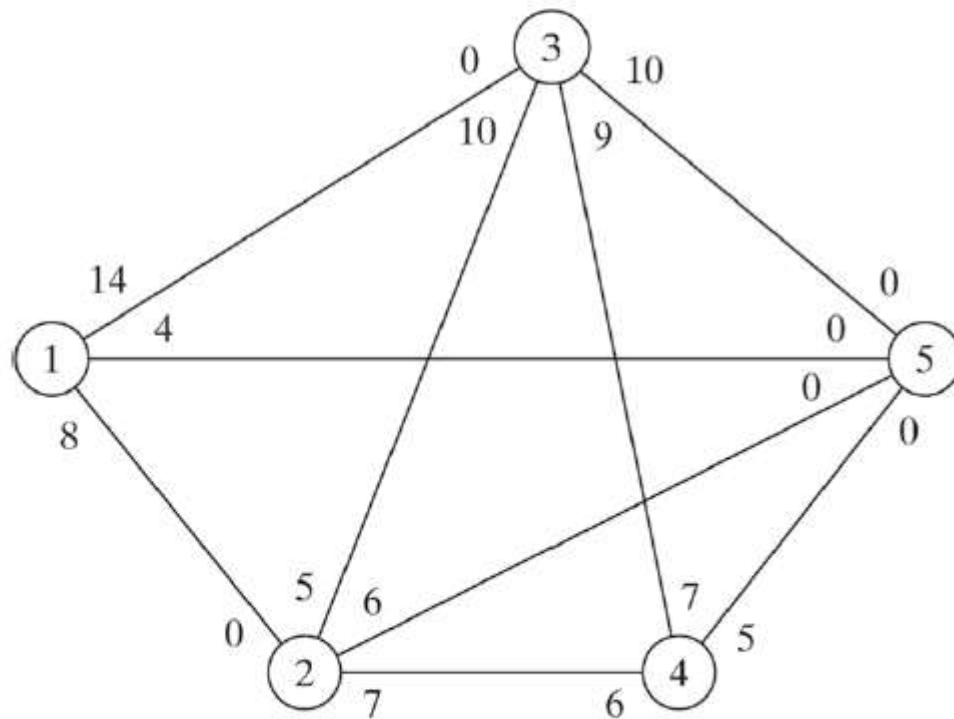1) In Example 6.4-2,

   (a) Determine the surplus capacities for all the arcs.

   (b) Determine the amount of flow through nodes 2, 3, and 4.

   (c) Can the network flow be increased by increasing the capacities in the directions $3 \rightarrow 5$ and $4 \rightarrow 5$?

2) Determine the maximal flow and the optimum flow in each arc for the network in Figure 6.32.

Figure 6.32 Network for Problem 2.