

M301 Introduction to Combinatorial Theory

homework sheet # 8

Problem # 1

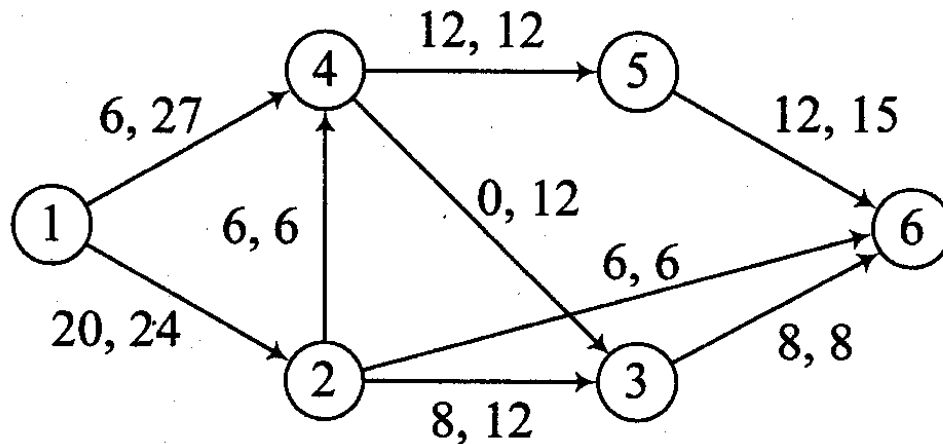
Compute the labeled tree with Prüfer sequence $(9, 8, 2, 3, 2, 1, 7, 7, 1)$.

Problem # 2

Compute all labeled trees on 4 vertices and the corresponding Prüfer sequences.

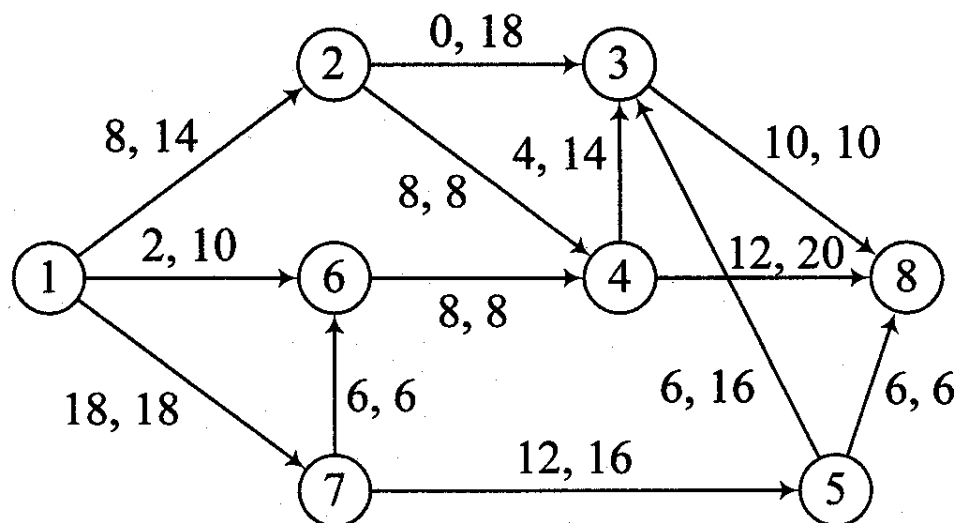
Problem # 3

In the following network, show that the current flow is maximal by exhibiting a minimum cut. Here, the first number is the current flow and the second number is the capacity of the edge.



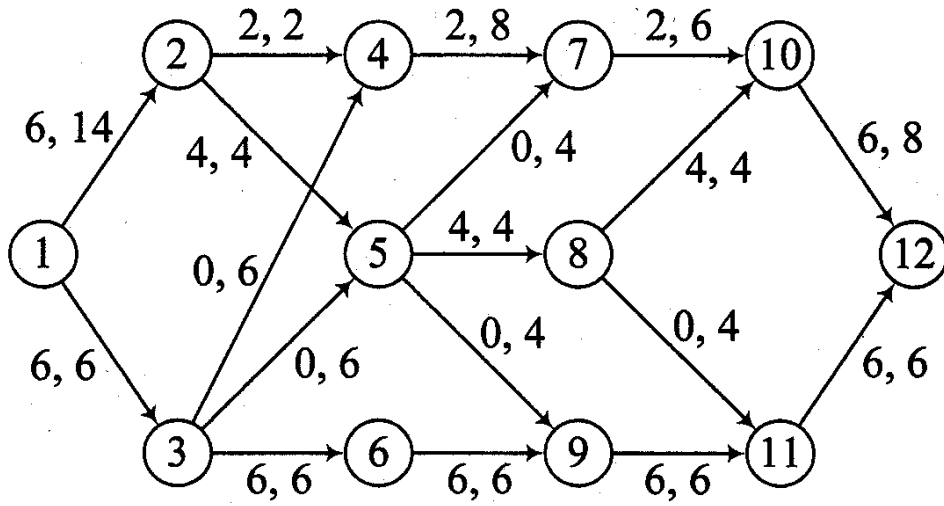
Problem # 4

Obtain a maximum flow and a minimum cut in the following network:



Problem # 5

Obtain a maximum flow and a minimum cut in the following network:



not collected