

Operations Research: theory and applications to networking

Maximum Clique

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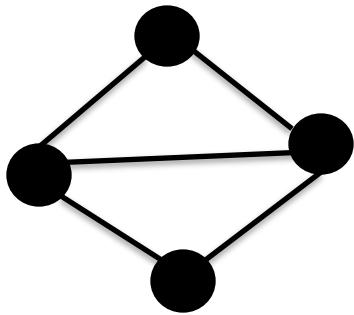
ICT4SS-CE

Clique

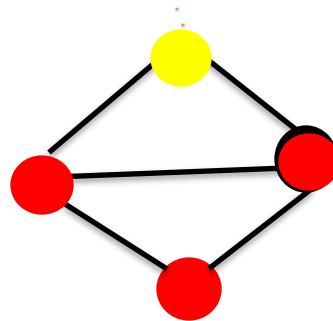
A clique in a graph is:

a set of nodes which are mutually adjacent (i.e., every pair of nodes in the clique are adjacent)

Given a graph find the clique of maximum cardinality!



Formulate the problem!



Graph coloring

As for graph coloring consider graphs with $N = 20, 40, 60$, in which for every pair of nodes (i,j) , an undirected edge (i,j) is added to the graph with probability p , independently from other edges.

For $p = 0.1, 0.3, 0.5$ generate three/four instances and solve the MC problem on them.