

CS5200 Homework 3 Graphs
Adam McNeil
Question 1)

Initialize n sets where n is the number of nodes and each set contains one of the nodes. Then for each edge in the graph there are two possibilities for the connected nodes.

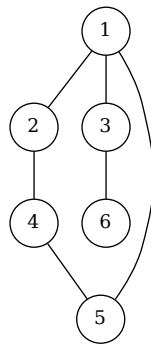
1) The nodes are in different sets

Then union the two set together and remove the odd sets

2) The nodes are in the same set

Then there is a cycle in the graph

If you run out of edges without finding a cycle there is no cycle in the graph



"123456"