

Data Visualization Quiz #5: Networks

First Name:

Last Name:

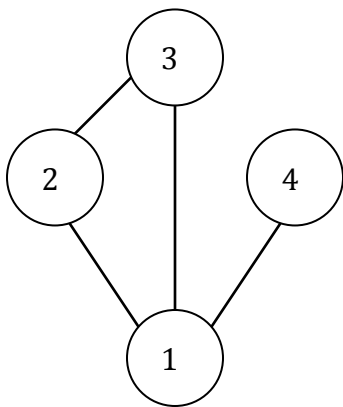
True or False (Write the entire word in the blank) – 1p Each

_____ The Erdos-Renyi Model assigns equal probability to all graphs with exactly N nodes.

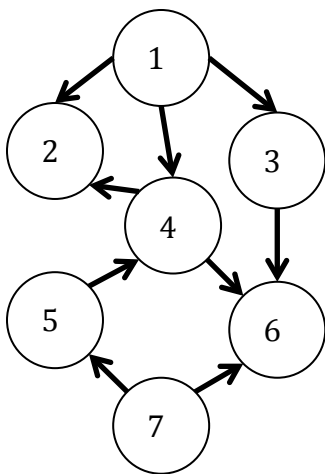
_____ The Small-World Model tends to generate graphs with cliques.

_____ Determining if two graphs are isomorphic can be done in polynomial time.

Given the following graph, compute the Local Clustering Coefficient of node 1. (3 pts)



Answer the following questions about the *directed* graph depicted below, 1 pt each.



Which node has the largest *in-degree centrality*?

Which node has the largest *out-degree centrality*?

Which node has the largest *total degree centrality*?

List the shortest path(s) from node 1 to node 6, respecting edge direction.