Network Analysis

10.1 Network Types

The difference between one-mode networks and two-mode networks is _____ _____.

In a two-mode network, there can only be _____ _____.

To transform a two-mode network into a one-mode network, _____ _____.

The advantage of transforming a two-mode network into a one-mode network is that _____ _____.

10.2 Paths and Routes

The difference between a node's neighbors and its component is that _____ _____.

The problem of the seven bridges of Königsberg has no solution because _____ _____.

The breadth-first search algorithm is worse for navigation scenarios than depth-first because _____ _____ _____.

To find the optimal path more efficiently, the A* algorithm _____ _____.

10.3 Centralities

The degree centrality of a node is _____ .

In order to decide which centrality metric to use, it is important to _____

_____.

Betweenness centrality is a good choice for analyzing information flow because _____
_____.

Eigenvector centrality does not simply consider the number of connected nodes but _____
_____.

10.4   Groups

An ego network is a network which _____
_____.

The Girvan-Newman algorithm detects communities in networks by _____
_____.

As with other clustering algorithms, an issue of community/partitioning algorithms is that _____
_____.