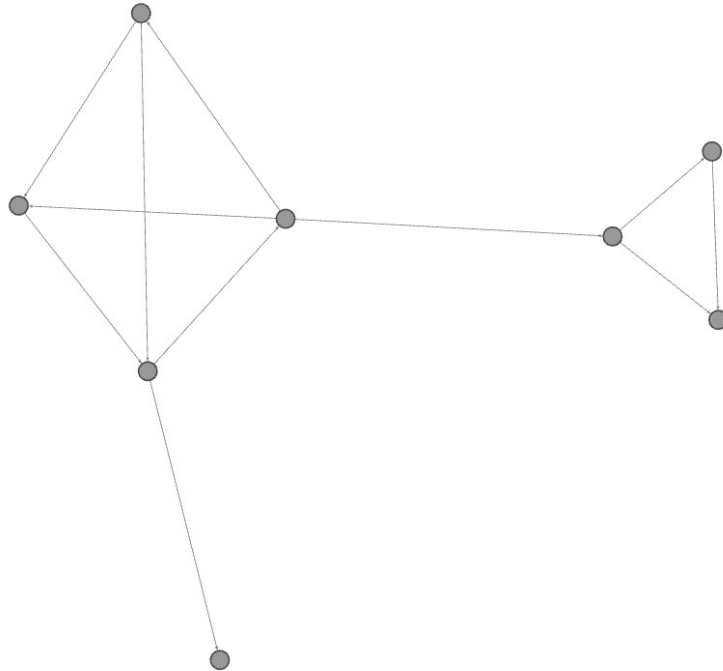


Extra Exercises 4

1. Given the following graph: Compute the node degree and betweenness centrality for all nodes.



2. Apply Girvan and Newman's algorithm to the graph in exercise 1. Provide the dendrogram.
3. Let G be a simple graph with n vertices and m edges. Show that $m \leq \binom{n}{2}$, and determine when equality holds.