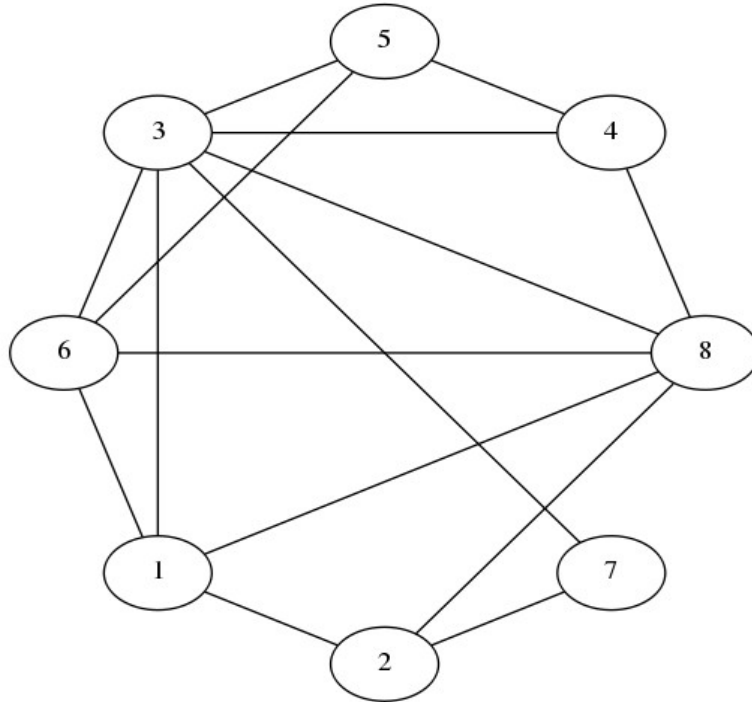


Homework #4

- 1) Construct a simple graph and write down its adjacency matrix.
- 2) Given the degree sequence $\{2, 3, 3, 4, 4, 4\}$, construct a graph. How many edges does it have? How does this number relate to the sum of the degree sequence? Why is this?
- 3) Find the Characteristic Path length, Diameter, and Radius for the graph below.



- 4) Construct a graph (order at least 5) that is self complementary. A self complementary graph is a graph whose complement is itself.