

Homework 08

Assigned on 2020-11-21

Due on 2020-11-27

1. (Star Network) Consider a star network, where a single node is connected to $N - 1$ nodes of degree one. Assume that N is much larger than 1.
 - (a) What is the degree distribution p_k of this network?
 - (b) What is the probability q_k that moving along a randomly chosen link we find at its end a node with degree k ?
 - (c) Calculate the degree correlation coefficient r for this network.
 - (d) Is this network assortative or disassortative? How can we tell?