

MTH 337, Sample Quiz 6

Spring 2022

You will have **15 minutes** to take the actual quiz.

1. Write a function to create a star graph using NetworkX. (A star graph consists of a central node surrounded by n outer nodes, each of which is connected to the central node by a single edge.)
2. Display the complete graph on 10 nodes using the circular layout with node labels turned on.
3. The *complement* of a graph G is the graph $comp(G)$ having the same list of nodes, but opposite edges. That is, the edge (i, j) is included in $comp(G)$ if and only if it is **not** included in G . Write a python function that takes a graph G as input and returns its complement $comp(G)$.