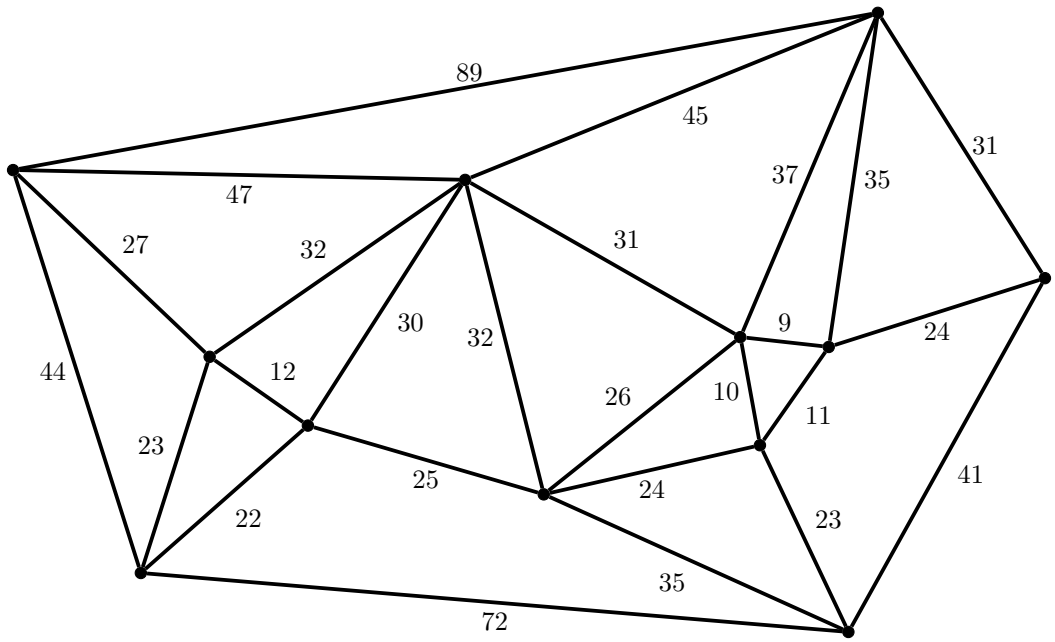
Math 1015: Homework #12

Question 1. Please invent your own graph of at least 8 vertices, and draw a spanning tree inside your graph.

Question 2. For this graph here:

How many different spanning trees are there? Draw each different one as a graph by itself.

Question 3. Consider this graph:



a) Please find the minimal spanning tree using the sorted edges algorithm (Kruskal's algorithm). Put a circled number next to each edge which shows the order in which you picked them, so I can tell what you're doing.

b) Please find the minimal spanning tree using the nearest neighbor algorithm (Prim's algorithm). Put a circled number next to each edge which shows the order in which you picked them, so I can tell what you're doing.