Problem 1: Graphs

In the following graph:

1. Find the shortest path from B to J.
2. Find the MST of the graph.

Problem 2: Kruskal’s Algorithm

Simulate Kruskal’s algorithm (without Union-Find) on the below graph. Draw the clouds and highlight any edges contained in that cloud for each step. Draw every step that causes clouds to merge until an MST is formed.
Problem 3: Spanning Trees and Forests

Write brief (no longer than 5 sentence) responses for each of these questions.

1. What is the difference between an MST (Minimum spanning tree) and an ST (spanning tree)?
2. Between an MSF (Minimum spanning forest) and an SF (spanning forest)?
3. Are they related? If so, how?