Question 1: What is a spanning tree in a graph?

Question 2: What is the difference between a minimum spanning tree and a maximum spanning tree?

Question 3: What is Kruskal's algorithm?

Answer Question 1: A spanning tree in a graph is a subset of edges that form a tree which includes all vertices of the graph.

Answer Question 2: A minimum spanning tree is a spanning tree with the smallest possible sum of edge weights, while a maximum spanning tree is a spanning tree with the largest possible sum of edge weights.

Answer Question 3: Kruskal's algorithm is a greedy algorithm that finds a minimum spanning tree for a connected weighted graph. It works by sorting the edges by weight and gradually adding the smallest-weight edges to the spanning tree, as long as they do not create a cycle.