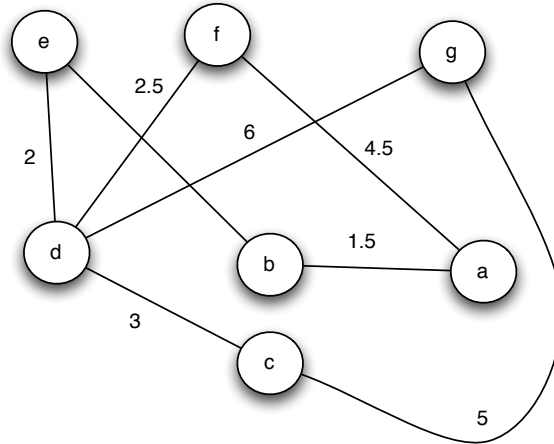


Show all work clearly and in order. Justify your answers whenever possible; You have 20 minutes to take this 10 point quiz.

1. (5 points) Show how Dijkstra's algorithm find shortest paths from vertex *a*.



Please demonstrate how Dijkstra's algorithm visits the vertices by drawing arrows on the edges of the graph and by showing the order that the vertices are visited.

2. (5 points) Show how Bellman-Ford algorithm find shortest paths from vertex a . Please demonstrate how Bellman-Ford algorithm update the distance of each vertex.

