1. Using any method you like, compute the following subgraphs for the weighted graph below. Each subproblem is worth 3 points. Each incorrect edge costs you 1 point, but you cannot get a negative score for any subproblem.

   (a) a depth-first search tree, starting at the top vertex;

   (b) a breadth-first search tree, starting at the top vertex;

   (c) a shortest path tree, starting at the top vertex;

   (d) the minimum spanning tree.