

X. (20 points total) For the weighted undirected graph pictured below, with vertex 0 as the source (start vertex): Trace Prim's minimum spanning tree algorithm exactly as Kruse's code would execute, giving bias to the lower number vertices on ties. Trace the algorithm as demonstrated in class, showing for each pass through the loop body:

- The current set X of "included vertices"
 - The edge the algorithm would choose to add to the minimum spanning tree
- Also, draw the final minimum spanning tree.

