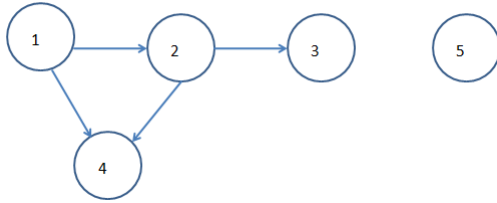
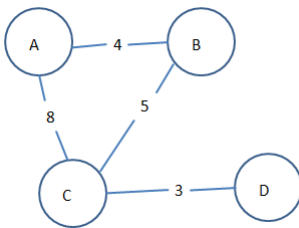


## COS226 Week 7 Activity

1. Consider the simple directed graph below. Starting with vertex 1 give the BFS order (listing each vertex as it is dequeued) and DFS preorder (listing all vertices in graph), assuming increasing order to break ties.



2. Consider the weighted graph below. Give the order in which the edges are added to the minimum spanning tree using Kruskal's algorithm and then using Prim's algorithm starting at vertex A.



3. Suppose you have a digraph as below. Give the DFS postorder, the corresponding topological order, and the strong components for the above digraph. Assume increasing order to break ties.

