Name:_____   Name: _____

Name:_____   Name: _____

Depth First Search

Consider the graph shown on the slides and give the order in which the vertices are visited. You must show all steps in the DFS (you may abbreviate function names).

```
FUNCTION DFS(G, start_vertex)              FUNCTION DFSRecursion(G, v, found)

   found = {v: FALSE FOR v IN G.vertices}     found[v] = TRUE

   DFSRecursion(G, start_vertex, found)       FOR vOther IN G.edges[v]

   RETURN found                                  IF found[vOther] == FALSE

                                                     DFSRecursion(G, vOther, found)
```