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).

<pre>FUNCTION DFS(G, start_vertex)</pre>	<pre>FUNCTION DFSRecursion(G, v, found)</pre>
<pre>found = {v: FALSE FOR v IN G.vertices}</pre>	<pre>found[v] = TRUE</pre>
<pre>DFSRecursion(G, start_vertex, found)</pre>	<pre>FOR vOther IN G.edges[v]</pre>
RETURN found	<pre>IF found[v0ther] == FALSE</pre>
	DFSRecursion(G, vOther, found)