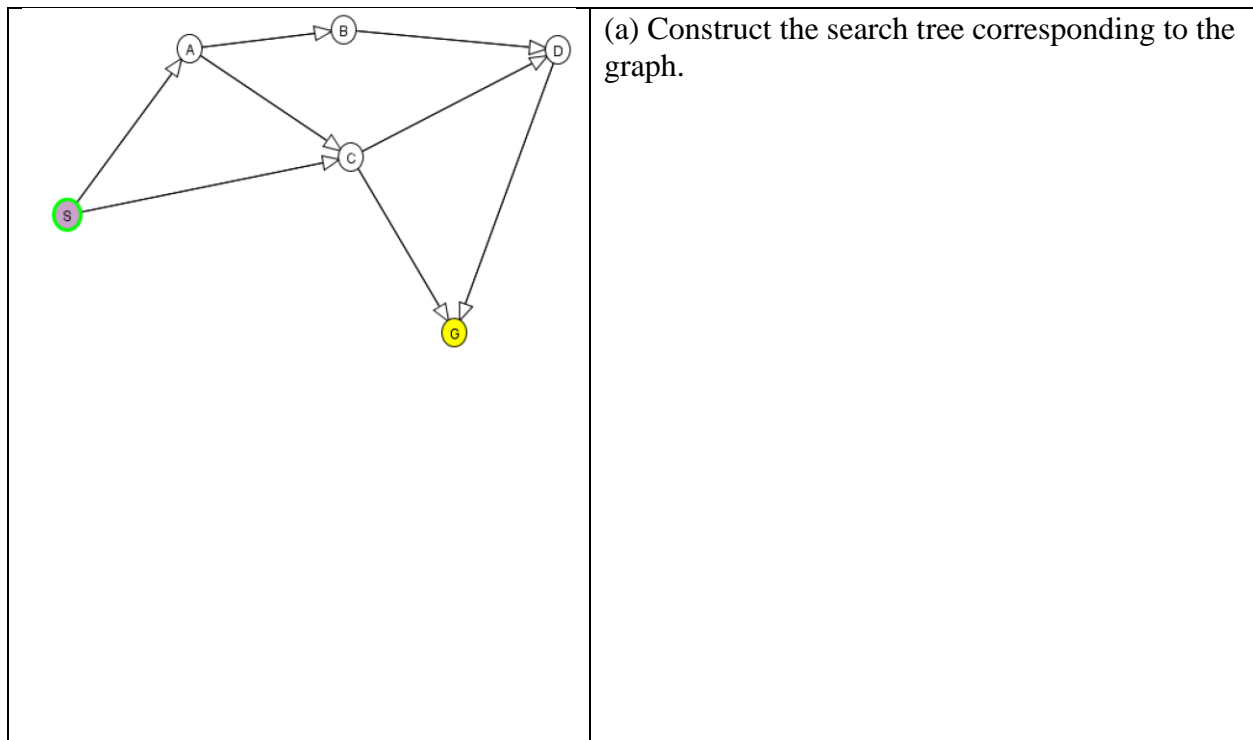# CPSC 322
BFS and DFS

Do this exercise in pairs. If there's an odd number, it's OK to do it in a group of 3.

Submit the sheet before leaving.

Name of Student (last, first)	Student Number

Question 1. Consider the problem of finding the shortest path from the start node S to the goal node G in the following graph. Answer the following questions.

	(a) Construct the search tree corresponding to the graph.

(b) Which nodes are expanded by the BFS search algorithm?

(c) Which nodes are expanded by the DFS search algorithm?

Question 2. Consider the search problem represented in below figure, where a is the start node and f is the goal node. Would you prefer DFS or BFS for this problem? Why?