## CS165 graph traversal worksheet

Given a directed graph with
nodes $\{a, b, c, d, e, f, g\}$ and edges $\{(\mathrm{a}, \mathrm{b}),(\mathrm{a}, \mathrm{c}),(\mathrm{b}, \mathrm{d}),(\mathrm{c}, \mathrm{d}),(\mathrm{b}, \mathrm{e}),(\mathrm{d}, \mathrm{e}),(\mathrm{d}, \mathrm{g}),(\mathrm{d}, \mathrm{f}),(\mathrm{e}, \mathrm{g})\}$
a) Draw the graph
b) Draw the DFS spanning tree from a, where node priority is letter order
c) Which of the following is depth first search (DFS), breadth first search (BFS), or Topological Sort (TS)

DFS BFS TS
a, b, c, d, e, f, g
a, b, d, e, g, f, c
a, b, c, e, d, g, f

DFS from Denver


## BFS from Denver



