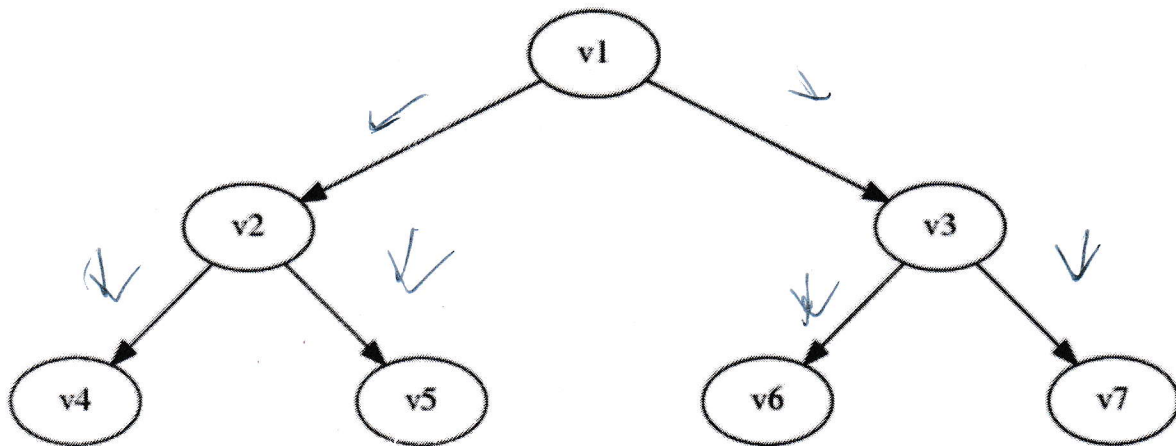


8. [5] A tree is a particular kind of graph. What kind of graph is that?



directed, acyclic, connected graph,
one-directional arrows, and all vertices have
a link

9. [4] What is the difference between a breadth-first search and a depth first search?

breadth uses a Queue structure for finding shortest path while dfs uses stack.

bfs can find single source shortest path in an unweighted graph while dfs must travel through more edges to reach a 'vertex'

bfs is better for finding closer vertices to the source while dfs is further.

bfs only thinks of near by vertices while
dfs explores all paths