1.) The graph is an edge list.

2.) Graphs 1, 2, 4, 5 are connected because all the edges are reachable in those graphs

3.) The output would not change if we ran the search in the other directions because the edges would still be reachable. I don't believe the output would change either if the graphs were weighted.

4.) A depth first search can be quicker if the path it chooses is right one, how ever it can end up going do an infinite path. Overall it is a slower search. The breadth first search will always find the answer and can be quicker, but it tends to use more memory.

5.) The big O execution time is O(v+e)