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Project 6

2.b
My depth-first search method is still unfinished. It took much longer than expected to finish bug fixing for my breadth-first search.

2.c
Theoretically, assuming it is found, the Big-O for this algorithm should be n, as there are 1/3 n nodes to follow with each n iteration to find the path, which forces the worst-case situation to iterate through all n).

3. c
The shortest path my algorithm found was 4 terms long: 1, 2, 7, 8.

3. d
I think the big-O of this algorithm would be(O(n), as the worst scenario would be to have to iterate through each node, finding the target node at the last one, assuming it is found.

5.b
I think the big-O for thus algorithm would be around n^3, as the algorithm iterates through all the terms in the row, at most n, then iterates through all their children, at most n, and then may return and re-iterate thorugh them all again.