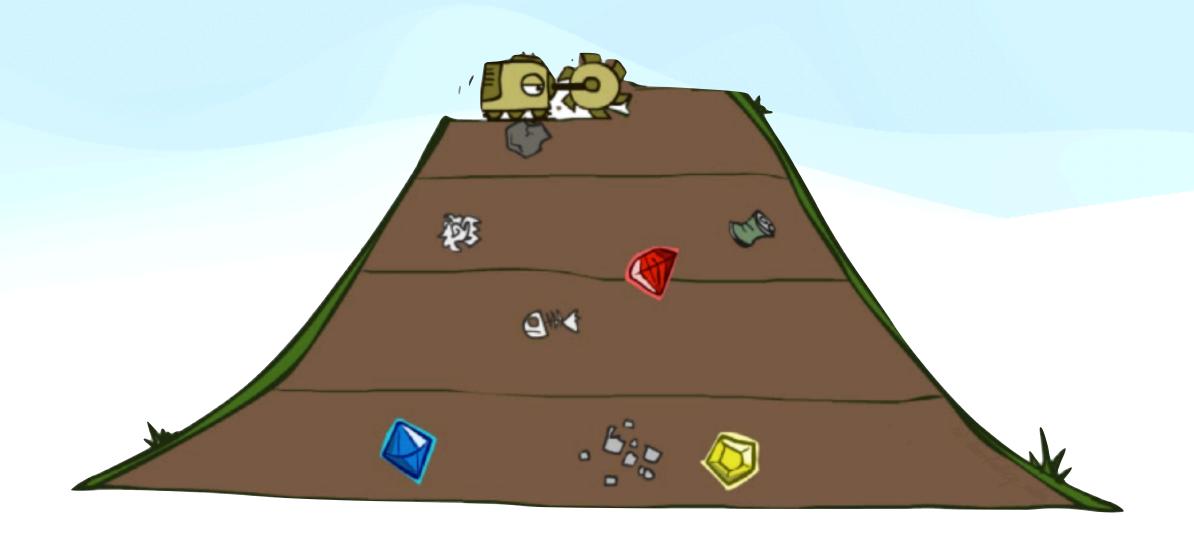
DFS vs BFS

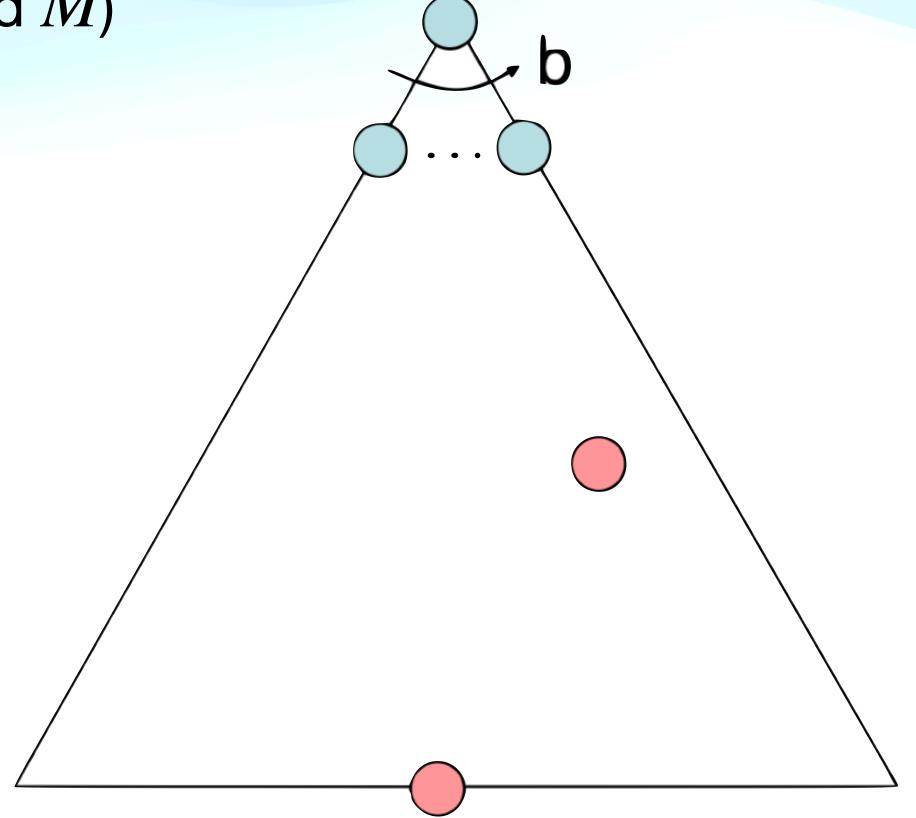




DFS: refinement

Completeness? Optimal?

- ullet Depth-Limited Search: Limit the search depth to M
- Complete if $M \ge s$ (need to design a good M)
- Iterative DFS: try $M=1,2,\cdots,S$
 - Behaves more like BFS
 - Advantage?
 - Space complexity: bs
 - Time complexity: $\sum_{i=1}^{s} b^i = \tilde{\mathcal{O}}(b^s)$



1 node b nodes

b² nodes

b^m nodes