

Algorithm	Time Complexity	Space Complexity	Complete?	Optimal?
BFS	Exponential: $O(b^{d+1})$	Exponential: $O(b^{d+1})$	Yes	Yes
UCS	Exponential: $O(b^{d+1})$	Exponential: $O(b^{d+1})$	It depends, if in finite space yes.	Yes
DFS	Exponential: $O(b^n)$	Linear: $O(bn)$	It depends, if in finite space yes.	No
DLS	Exponential: $O(b^n)$	Linear: $O(bn)$	It depends, if in finite space yes.	No
IDS	Exponential: $O(b^n)$	Linear: $O(bn)$	Yes	Yes
A*	Depends on the heuristic: Exponential in worst case linear in best	Linear: $O(bn)$	Yes	Yes