

1.

Algorithm	Time Complexity	Space Complexity	Complete	Optimal
BFS	$O(b^d)$	$O(b^d)$	Yes	Yes only if all of the costs are equal
UCS	$O(b^{(1+C/\epsilon)})$	$O(b^d)$	Yes	Yes as long as costs are non negative
DFS	$O(b^d)$	$O(bd)$	Yes but only if the graph is finite	No
DLS	$O(b^d)$	$O(bd)$	No	No
IDS	$O(b^d)$	$O(bd)$	Yes	Yes, only if costs are equal
A*	$O(b^d)$	$O(b^d)$	Yes	Yes

d=depth, b=branching factor, DLS the d is actually the limit

