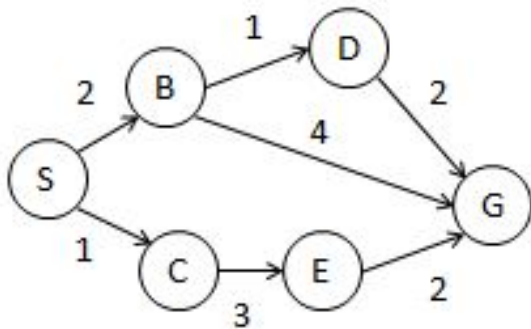


Consider the following search problem, where S is the start state and G is the goal, given as a graph:



	S	B	C	D	E	G
$h_1$	0	0	0	0	0	0
$h_2$	4	2	1	2	0	0
$h_3$	4	3	3	2	0	0

- Which heuristics are admissible (or write none)?
- Which heuristics are consistent (or write none)?
- For heuristic  $h_3$ , fill in the following table, showing the node expanded, the fringe, and the closed list, for  $A^*$  graph search. Each item on the fringe should be a pair: path taken to n and  $f(n)$ .

Node Expanded	Fringe	Closed List

- For heuristic  $h_3$ , what path will  $A^*$  graph search return?