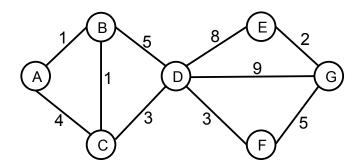
Heuristic function properties



Consider the state space graph shown above. A is the start state and G is the goal state. The costs for each edge are shown on the graph. Each edge can be traversed in both directions. Complete the heuristic function h shown below. All the values are fixed except h(B).

| Node | A | В | С | D | E | F | G |
|------|----|---|---|---|-----|-----|---|
| h | 10 | ? | 9 | 7 | 1.5 | 4.5 | 0 |

For each of the following conditions, write the set of values that are possible for h(B). For example, to denote all non-negative numbers, write $[0, \infty]$, to denote the empty set, write \varnothing , and so on.

- 1. What values of h(B) make h admissible?
- 2. What values of h(B) make h consistent?