Q9: Short Answer: Heuristics

Problem 9: Short Answer: Heuristics

Let $h_1(s)$ be an admissible A^* heuristic. Let $h_2(s) = 2h_1(s)$. Mark whether each of the following statements is true or false.

Part 1

2/2 points (ungraded)
The solution found by A^* tree search with h_2 is guaranteed to be an optimal solution.

○ True

⦿ False ✔

Submit

✔ Correct (2/2 points)

Part 2

2/2 points (ungraded)
The solution found by A^* tree search with h_2 is guaranteed to have a cost at most twice as much as the optimal path.

⦿ True ✔

○ False

Submit

✔ Correct (2/2 points)

Part 3

2/2 points (ungraded)

The solution found by A^* graph search with h_2 is guaranteed to be an optimal solution.

○ True

◉ False ✔

Submit

✔ Correct (2/2 points)