

## Q8: Short Answer: Dominance

### Problem 8: Short Answer: Dominance

3/3 points (ungraded)

Consider two different  $A^*$  heuristics,  $h_1(s)$  and  $h_2(s)$ , that are each admissible. Now, combine the two heuristics into a single heuristic, using some (not yet specified) function  $g$ . Give the choice for  $g$  that will result in  $A^*$  expanding a minimal number of nodes while still guaranteeing admissibility.

☒  $\max(h_1(s), h_2(s))$  ✓

☐  $\min(h_1(s), h_2(s))$

☐  $\sqrt{h_1(s)^2 + h_2(s)^2}$

☐  $h_1(s) + h_2(s)$

☐  $\frac{h_1(s) + h_2(s)}{2}$

Submit

✓ Correct (3/3 points)