Do the following problems from the Russell & Norvig Textbook

Problem 3.1

Problem 3.7

Problem 3.8

Problem 3.18 Draw a visual for this one.

Problem 4.1 I want the sequence of queues generated in the course of the search, along with the value of f(n) for each node in the queue.

Problem 4.2 Assume h(n) is admissible.

Problem 4.3 Do this by defining h(n) and g(n)

Problem 4.4 I want you to define the state space & the heuristic, prove h(n) is admissible but inconsistent, and show how the optimal solution is not returned with A* GRAPH-SEARCH. (Remember that GRAPH-SEARCH uses a search graph and not a search tree.)

Problem 4.7

Problem 4.12 Assume your comparison function is transitive.

Hand in a hard-copy of your responses to the questions by the start of class on Monday, April 18.