**Heuristic for Question 6:**

I tried to find the sum of the shortest distances between the unexplored corners. And used it as the heuristic because it is consistent, and it will always choose the same corners for a given situation. It solves the simpler problem where we find the number of moves when all the walls are removed. The heuristic will return 0 at a goal state since the minimum distance to a corner when you are already in a corner is 0, and will never return a negative since manhattan distance can not be ever negative.

**Heuristic for Question 7:**

Use the given maze-distance function to determine the heuristic. Takes around 40 seconds to run and expands 4137 nodes. This heuristic is consistent, because the maze distance will always find the same distance to a given piece of food. This solves the simpler problem of finding the distance to the farthest piece of food. Heuristic will also return 0 at a goal since if pacman has eaten all of the food then the distance to the nearest food will be the one pacman is currently on and will never return a negative, since distances can’t be negative.

The approximate time I spent on this homework was 2 weeks, 20 hours a week.