a.

A* is a faster version of dijkstra because it use BFS and the heuristic function to speed the process up.

b.

The point are in the same relative location in the two spots because the number of nodes expanded and the running time are inter-dependent and hence increase at the same rate.

2

In the plot, we can see that dijkstra always run twice as fast as WA*, which is the same as W. Hence, there is a high chance that they are implementing Dijkstra the wrong way, that is they are simply multiplying the cost by 2