Q1:

1. The difference is that the heuristic value of a game state does not need to be admissible. A good heuristic for A* search is monotone. The heuristic should consistently work and should not expend too many states. A good heuristic for a game state should consistently be able to win the game for the agent. Also, the heuristic should win the game in a reasonable amount of time.

Q2:

1. Because the agent chose the best step in the situation. When faced with imminent death, the agent still has available legal moves, so it will choose a legal move with the highest score, which may just be to commit suicide.
2.
    a. Not same
    b. Same
    c. Not same

Q3:

1.
    a. In the best case scenario, the alpha-beta will be able to reach 2d depth.
    b. In the worst case scenario, the alpha-beta will be able to reach d depth. This is the same as the minimax agent as in the worst case.
2. False. Because pruning prunes things that does not affect the root.