1. **How many states did Minimax and Alpha-Beta expand for the starting position provided above?**

   For Minimax: 17607 and Alpha-Beta: 1414

2. **How can player 'O' win the game from a state such as the one shown above? Note that this is a "how" question.**

   The only way player X wins from a situation above is to play optimally. Therefore for player 'O' to win they would have to play optimally while at the same time forcing X to play non-optimally.

3. **Is it possible for Minimax and Alpha-Beta to expand the same number of nodes? Explain why not, or under which conditions this is possible.**

There may be a chance for minimax to expand the same amount as Minimax, when the nodes are presented in a way that during evaluation of each move, all the values are in an increasing order. (that is the order in which the moves are evaluated will have a score that returns all 0, except for the last node.) this will force the alpha-beta algorithm to evaluate every move without pruning any nodes. This is essentially a minimax algorithm.