

# CSE 332: Data Structures and Parallelism

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## Section 8: P3 and Search

### 0. Cutoffs

Provide a short diagram or description to explain the following parameters from P3:

(a) ply

(b) cutoff

(c) divideCutoff

(d) PERCENTAGE\_SEQUENTIAL

### 1. Efficiency

Circle the **most efficient** option from each pair of possible implementation strategies for P3:

(a) To create threads for each move in a `List<M>` during Parallel Minimax:

Create threads in a `for` loop   **OR**   Create threads with divide-and-conquer

(b) To pass copies of boards to these threads:

Copy the board *inside* the thread   **OR**   Copy the board *before* passing it to the thread

(c) To evaluate a list of moves using Alpha-Beta pruning:

Evaluate the moves in the order provided   **OR**   Sort the moves best-first, then evaluate in sorted order

## 2. Alpha-Beta

Determine the value of the root node after running Alpha-Beta on the following tree (and cross out pruned branches/nodes):

