1. First heuristic I chose based on that edge board and near edge moves have less possible moves. So they should have different score value. It's close to center_score heuristic, but it doesn't differ all centered moves that not close to edge. Cuz all centered moves have same amount of freedoms (possible moves) they should not be differ.

Edge move value = 1

Near edge move value = 2

All centered moves value = 3

2. Heuristic build on board of values for possible moves. Value of each move = number of possible moves. Even changing board size will have same number of possible moves for corners, closest corner siblings, edge moves etc. And all center moves that are more than 2 cells from edge will always have 8 possible moves.

```
2 3 4 4 4 4 3 2
3 4 6 6 6 6 4 3
4 6 8 8 8 8 6 4
4 6 8 8 8 8 6 4
4 6 8 8 8 8 6 4
4 6 8 8 8 8 6 4
3 4 6 6 6 6 4 3
2 3 4 4 4 4 3 2
```

It’s updated version of first heuristic, but it’s more more accurate, cuz it’s more precisely takes into account the number of freedoms of each move.

3. The last version is “board values” version with counting difference with other player value.

Functions performance results are:

```
                    *************************
                         Playing Matches
                    *************************

Match #   Opponent    AB_Improved   AB_Custom   AB_Custom_2  AB_Custom_3
                       Won | Lost   Won | Lost   Won | Lost   Won | Lost
   1       Random      17  |   3    16  |   4    16  |   4    17  |   3
   2       MM_Open     17  |   3    12  |   8    13  |   7    17  |   3
   3      MM_Center    19  |   1    13  |   7    13  |   7    18  |   2
   4     MM_Improved   13  |   7    10  |  10    11  |   9    10  |  10
   5       AB_Open     13  |   7     8  |  12    11  |   9    11  |   9
   6      AB_Center    10  |  10    11  |   9    16  |   4    15  |   5
   7     AB_Improved    7  |  13    11  |   9     8  |  12     9  |  11
--------------------------------------------------------------------------
          Win Rate:      68.6%        57.9%        62.9%        69.3%
```

First custom heuristic has worst win rate, because it have simplest board value structure. Second heuristic is more precise in setting value to each move, it gets better win rate, but still don’t count opponent position. The third takes into account this moment, and therefore has the best percentage of victories.

So, I choose third heuristic because:

1. More accurately estimates the possible move than first heuristic.
2. It counts other player position in calculation (first two don’t take it to account)
3. Have best score on test matches