Buying Items:

Each item has a specific value that changes when item is bought or could not be bought.

A strategy that can be called *Half Hearted Bidding* has been utilized. Since the number of bidders is not known, it is assumed that the prices will fall down each time a bidder is out of the auction. If a bidder is not out of the auction, a certain amount of number of bids won is probabilistically guaranteed.

Consider bundle value defined by value of each item. Let us predefine as a multiplier for bundle value if bundle is won which will lower its expected value next round. Now, define as an adjustment value for each time the bid is lost, such that:

If won:

If lost:

Where is an item in the bundle . In this manner, we expect to win about amount of bids.

As of writing: and

When buying a bundle, its value is calculated per each . Then, is used. Finally, if this is a profitable offer, calculated by a comparison to maximum expected profit per item with a , the minimum of either will be sent.

Selling Items:

For each item, we assign a value for maximal profit possible from that item. This is done iteratively: for B’s value to be calculated A is calculated first and value of C, D is derived from these. For E, F, a factor of how much F would cost compared to E is used, with amount 7/24 (1/3 + 1/4) / 2.

We compare the following maximal value expected with the bundle’s sell value. If , the bundle is sold, with the exception of F when in wallet.