

General Scoring Arrangements
<https://parleyyang.github.io/CUPOKS/index.html>

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For all candidates, the selection is solely based on a ranking of their summed score over the three selection tournaments on the 7th and 17th January, and 4th February. We index these three tournaments by $i \in [3]$ sequentially.

Let x_i denote the rank the candidate gets in the i -th tournament, and let r_i denote the number of rebuys in the i -th tournament.

Let y_i denote the total participants in the i -th tournament, and let

$$\bar{y}_i = \begin{cases} 20 & \text{if } y_i < 20 \\ 27 & \text{if } y_i > 27 \\ y_i & \text{else} \end{cases}$$

Let z_i be the total entries in the i -th tournament, that is, the total number of buy-ins in those tournaments. The candidate has the following score for the i -th tournament:

$$s_i = \left\lfloor 10 \times \left(\log \left(\frac{\bar{y}_i}{x_i} \right) + 0.9^{\mathbf{1}(r_i=2)} \times \log \left(\frac{z_i}{x_i} \right) \right) \right\rfloor \quad (1)$$

where \log refers to natural logarithm and $\lfloor \cdot \rfloor$ is the floor function, i.e. $\lfloor x \rfloor = \max\{y \in \mathbb{Z} : y \leq x\}$. $\mathbf{1}(r_i = 2)$ takes the value 1 if $r_i = 2$ and 0 otherwise. That is, if the candidate rebuy for twice, the 0.9 would be multiplied, otherwise not. If the candidate did not participate one or two of the games, the score is set as zero.

The total score is then just a sum of the three scores, i.e. $\sum_{i=1}^3 s_i$

As an example, suppose a candidate places the 2nd, 5th, and 15th with no rebuys, and in the three games having 15, 25, and 25 players respectively; and suppose the total rebuys of the three games are 10, 15, and 20, then $\bar{y}_1 = 20, \bar{y}_2 = 25, \bar{y}_3 = 25, z_1 = 25, z_2 = 40, z_3 = 45$. and hence the score for each of the games goes as 48, 36, 16. The total would be 100.

As another example with absence, suppose a candidate only attends the second tournament (with above setting) and came the 1st, with 2 rebuys, then the score received would be 65. The total would also be 65. If this candidate only had 1 rebuy, the score would otherwise be 69.

There will be a scoreboard of all candidates proceeding the end of each tournament.

If there is a tie-up for last (one or more) places, an additional competition would be held for those who tied-up to determine the rankings.