

The Exact Rules for this PRCV Program

This PRCV ruleset is designed for small numbers of voters where ties can be very likely

- Each ballot can rank the candidates in whatever order they want, and can rank whoever they want (or not)
- The winning threshold is calculated via:
 - First find the threshold percentage through the equation:
 - $$t = \frac{1}{(\text{Number of winners} + 1)}$$
 - This threshold is in the mathematic percentage (I.e. 0.5 for 50%, 0.94 for 94%)
 - Then find the total number of votes to win by the equation:
 - $((\text{number of votes}) * t) + 1$ (percent plus 1)
- When a candidate reaches the winning threshold, they win and any future ballots that vote for them move on to their next choice
- If no candidate has reached the winning threshold and the max number of winners has not yet been reached, eliminate the last place candidate
 - If the last place candidates are tied, see if all tied candidates can win
 - If all tied candidates cannot win, see if they can all be eliminated and still allow the desired number of winners to win
 - If all tied candidates cannot be eliminated, use the total votes (how many ballots was the candidate ranked any value on?) to break the tie
 - If the candidates are still tied and they still cannot all win or be eliminated, a recall election is needed.
- Once all seats are filled or tied, the election is over