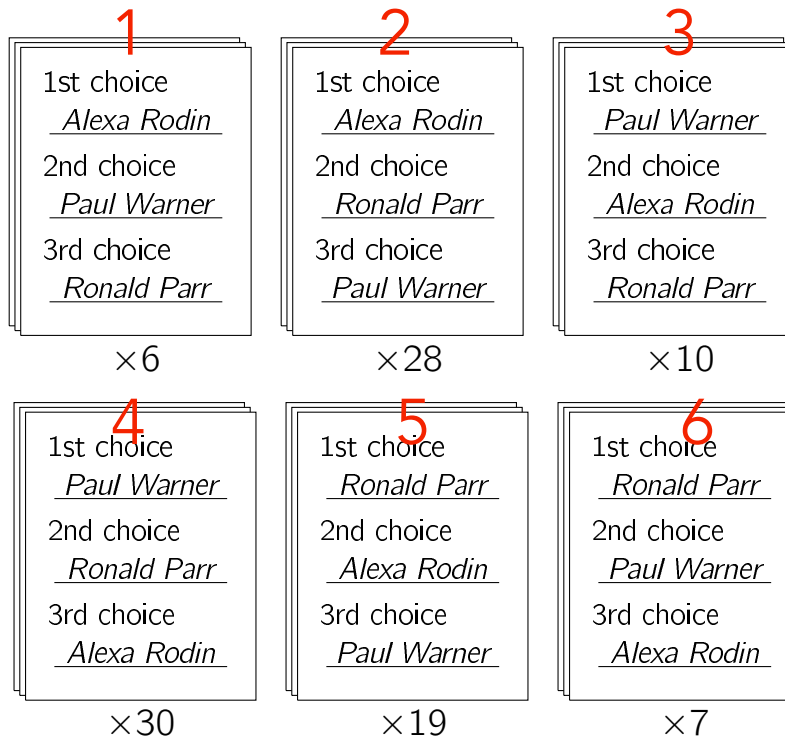




by Steven C., Huntsville

# Every Vote Counts

Help Pintopia's election commissioner count the ballots in this rank-based mayoral election!



Although, it seems that the way votes are counted has changed over the years....  
Who would have won with each of these ways?

- Consider three head-to-head comparisons of the candidates by ignoring one candidate at a time, and elect the candidate who is ranked higher by a majority of voters in both of his/her head-to-head comparisons. (Adopted 4/9/12)
- Elect the candidate with the most "1st choice" votes. (Adopted 5/1/27)
- Eliminate the candidate with the fewest "1st choice" votes, and elect the candidate ranked higher by a majority of voters in a head-to-head comparison between the remaining two. (Adopted 5/8/74)

Can you find a **twelve-letter phrase** to describe this situation?

# Every Vote Counts

**April 9, 1912: Ronald wins as he beats Alexa with 56/100 votes and Paul with 54/100 votes.**

Ron againsts Alexa:

Ballot 1 - 6 for Alexa  
Ballot 2 - 28 for Alexa  
Ballot 3 = 10 for Alexa  
Ballot 4 = 30 for Ron  
Ballot 5 = 19 for Ron  
Ballot 6 = 7 for Ron

so 56 for Ron vs. 44 for Alexa.

Repeat this for the other 2 match ups, and you see that Ron still wins.

The strategy date 4/9/12 yields `ARRO` when indexed into RONALD PARR

**May 1, 1926: Paul wins with 40/99 votes.**

Paul is first on ballots 3 and 4 for a total of 40  
Alex is first on ballots 1 and 2 for a total of 34  
Ronald is first on ballots 5 and 6 for a total of 26

So Paul wins.

The strategy date 5/1/26 yields `WPAR` when indexed into PAUL WARNER

**May 8, 1974: Ronald is eliminated with only 26/100 votes. Alexa then wins with 53/100 votes.**

Similar to the first one, except that Ronald is eliminated first (he only won 1st on ballots 5 and 6), than just take each ballot and see who wins and count those votes. So Alexa wins on ballots 1,2,5 for a total of 53.

The strategy date 5/8/74 yields `ADOX` when indexed into ALEXA RODIN

**Final answer: ARROW PARADOX**