

Homework help:

1E#2,3,4 (Pairwise comparison with missing information).

(a) In a head-to-head matchup the candidates can tie, or one candidate can win. How many total points are awarded to the two candidates in case of a win? How many total points are awarded to the two candidates in case of a tie?

(b) With 3 candidates, there are only 3 matchups (AvB, AvC, BvC), and each one is either a win for one of the candidates or a tie for both. How many total points get awarded to the candidates after all three matches are done?

(c) With 4 candidates, there are more matchups (AvB, AvC, AvD, BvC, BvD, CvD), but each one is still either a win or a tie. How many total points now?

(d) With “ N ” candidates, there are more matchups. Each of the candidates (N of them) gets matched up with all of the other candidates ($N - 1$ of them). For instance, with $N = 4$ candidates, 4 candidates get matched up with 3 other candidates for a total of $(4)(3) = 12$ matches! Wait, why are there only six matches listed in part (c)? What is the correct formula (not $(N)(N - 1)$ but ...)?

Activity

Consider the following preference schedule:

	5	4	4	3	3	1	1
1st	G	C	B	E	E	D	A
2nd	C	D	D	G	B	B	G
3rd	D	A	E	D	F	A	B
4th	A	F	A	A	A	E	E
5th	B	B	C	F	G	C	C
6th	F	E	F	B	C	F	F
7th	E	G	G	C	D	G	D

Who wins under plurality? (Be careful!)

What if we give second place votes half-credit, who wins?

What if we count all the ranks and use Borda count, who wins?

Pick one of Plurality-with-elimination, Survivor, or Pairwise-Comparison, and calculate who wins (circle which method you are using).