

MA111 – Quiz #1 Solutions

Friday, September 4

Consider the following preference schedule:

Number of Voters	8	4	3	2
1st choice	A	B	B	D
2nd choice	C	D	C	C
3rd choice	B	C	D	B
4th choice	D	A	A	A

1. How many votes would each candidate receive using the Plurality Method, and who would win using this method?

A:8, B:7, C:0, D:2. A would win using the Plurality Method.

2. How many points would each candidate receive using the Borda Count Method, and who would win using this method?

Number of Voters	8	4	3	2
1st choice:4	A:32	B:16	B:12	D:8
2nd choice:3	C:24	D:12	C:9	C:6
3rd choice:2	B:16	C:8	D:6	B:4
4th choice:1	D:8	A:4	A:3	A:2

A:41, B:48, C:47, D:34. B would win using the Borda Count Method.

3. Is there a majority candidate? If so, who is it?

A majority candidate would need more than half the votes. There is a total of 17 votes, so 9 votes are needed. No candidate received 9 votes, so there is no majority candidate.

4. Is there a Condorcet candidate? If so, who is it?

A Condorcet candidate would need to beat every other candidate in individual head-to-head comparisons. C beats A with 9 votes to 8. C beats B with 10 votes to 7. C beats D with 11 votes to 6. So C is the Condorcet candidate.