

The Borda Count Method

Lecture 3 Section 1.3

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Mon, Sep 2, 2013

- 1 The Borda Count Method
- 2 Icelandic Parliamentary Elections
- 3 Assignment

Outline

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The Borda Count Method

Definition (The Borda Count Method)

By the **Borda count method**, the voters rank the candidates. Then each rank is assigned points, higher ranks receiving more points. The candidate with the most points wins.

The Math Club Election

Example (The Math Club Election)

- Reconsider the Math Club election with 4 points for 1st, 3 for 2nd, 2 for 3rd, and 1 for 4th.

	1	2	3	4	5	6	7	8	9	10	11	12	13
1st	A	B	A	C	B	C	A	B	C	A	C	D	A
2nd	B	D	B	B	D	B	B	D	B	B	B	C	B
3rd	C	C	C	D	C	D	C	C	D	C	D	B	C
4th	D	A	D	A	A	A	D	A	A	D	A	A	D

	14	15	16	17	18	19	20	21	22	23	24	25
1st	A	C	A	C	D	C	A	D	D	C	C	D
2nd	B	B	B	B	C	B	B	C	C	B	B	C
3rd	C	D	C	D	B	D	C	B	B	D	D	B
4th	D	A	D	A	A	A	D	A	A	A	A	A

	26	27	28	29	30	31	32	33	34	35	36	37
1st	A	D	C	A	D	B	A	C	A	A	D	A
2nd	B	C	B	B	C	D	B	D	B	B	C	B
3rd	C	B	D	C	B	C	C	B	C	C	B	C
4th	D	A	A	D	A	A	D	A	D	D	A	D

The Preference Schedule

Example (The Preference Schedule)

Vote Count	14	4	11	8
1st	A	B	C	D
2nd	B	D	B	C
3rd	C	C	D	B
4th	D	A	A	A

The Preference Schedule – Alternative Format

Example (Alternative Format)

Vote Count	14	4	11	8
A	1	4	4	4
B	2	1	2	3
C	3	3	1	2
D	4	2	3	1

The Math Club Election

Example (The Math Club Election)

- Which candidate wins?

The Math Club Election

Example (The Math Club Election)

- Which candidate wins?
- Which candidate comes in last?

The Math Club Election

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- Which candidate wins?
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- Would the outcome be different if the points were 3, 2, 1, 0?

The Math Club Election

Example (The Math Club Election)

- Which candidate wins?
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- What about 20, 15, 10, 5?

The Math Club Election

Example (The Math Club Election)

- Which candidate wins?
- Which candidate comes in last?
- Would the outcome be different if the points were 3, 2, 1, 0?
- What about 20, 15, 10, 5?
- What about 8, 4, 2, 1?

The Math Club Election

Example (The Math Club Election)

- Which candidate wins?
- Which candidate comes in last?
- Would the outcome be different if the points were 3, 2, 1, 0?
- What about 20, 15, 10, 5?
- What about 8, 4, 2, 1?
- What about 1, 2, 3, 4?

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Icelandic Parliamentary Elections

Icelandic Parliamentary Elections

Consider the Icelandic Parliamentary Elections, the method for apportionment of constituency seats.

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Collected Problems

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- Page 28: Exercise 7.

Assignment

Assignment

- Page 31: Exercises 21, 25, 27, 29.