

Chips, Fruit, Nuts or Pretzels?

1. How many voters do we have in this election?
2. Do we have a majority candidate?
3. Find the winner using the Plurality with Elimination method.

	7	8	10	2	2
1 st	C	N	P	C	C
2 nd	N	P	F	P	F
3 rd	F	C	C	F	N
4 th	P	F	N	N	P

A new “We Love Pretzels” campaign causes some people to change their votes in favor of pretzels. (Compare the new table to the old one.)

1. Do we have a majority candidate?
2. Find the winner using the Plurality with Elimination method.

	7	8	10	2	2
1 st	C	N	P	C P	C P
2 nd	N	P	F	P C	F C
3 rd	F	C	C	F	N F
4 th	P	F	N	N	P N

The above shows that the Plurality with Elimination Method can Fail which criterion?

Now suppose we have an election between Arya (A), Bran (B), and Jon (J).

	6	5	3	7
1 st	A	B	B	J
2 nd	J	A	J	B
3 rd	B	J	A	A

1. Find the winner using Plurality with Elimination.

Now suppose the three voters in the third column change their votes: they pick 1st Jon, 2nd Bran, and 3rd Arya.

2. Draw the new preference schedule which reflects this change. Is this change an appropriate way to test monotonicity? Explain.

3. Find the winner using plurality with elimination.

4. Suppose instead, from the original election, that the six voters in the first column changed their votes to pick 1st Bran, 2nd Jon, and 3rd Arya. Is this change an appropriate way to test monotonicity? Explain.