

Chapter 1 Practice Quiz

Figure 1 – Preference Schedule

No. of Voters	14	10	8	4	1
1st choice	D	B	A	C	B
2nd choice	C	C	B	A	A
3rd choice	B	A	C	B	C
4th choice	A	D	D	D	D

1. Answer the following questions about the preference schedule given above.
 - (a) Who is the winner of this election using the plurality method?
 - (b) What is candidate A's Borda total?
 - (c) Is B a Condorcet candidate?
 - (d) Can there be two Condorcet candidates in this election?
 - (e) Who is the winner of this election using the method of pairwise comparisons? (Hint: Consider your answers from c and d.)
 - (f) How many votes are needed for a majority?
 - (g) In the first round of plurality with elimination, is there a winning candidate? If not, which candidate is eliminated first?
 - (h) With the extended plurality method, what is the ranking of these candidates?
2. Suppose candidate X is a winner of the election, but for one reason or another there is a new election. If the only changes are that one of the other candidates withdraws or is disqualified, then which fairness criterion says that X should win the new election?
3. Explain why the plurality-with-elimination method satisfies the majority criterion.