Names:

POSSIBLE EXAMPLES

Today we construct more examples, especially to illustrate certain ideas of fairness. For each scenario below, suppose an election has four candidates: Christopher, David, Matt and Peter. Construct an example preference schedule and choose one of our four voting methods so that the statement comes true. Your preference schedule should have between 20 and 30 voters, and you should show steps to justify that the statement is true. There are many possible correct answers to these.

1. David gets the most first place votes, but David doesn't win the election.

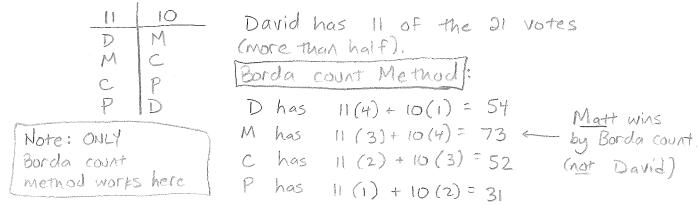
Preference Schedule:

This example was done in class! See your class notes.

Who has the most first place votes: Christopher, Matt or Peter?
Which voting method(s) have David as the winner? (show work to confirm David wins.)

each example below must show both a preference schedule AND a voting method.

2. David gets more than half the first place votes, but David does not win the election.



3. Peter gets the most last place votes, and Peter wins the election.

energiage Circles	6	6	Peter has 12 of the 23 last-place
P	M	C	votes (more than any other).
C	10		Using [plurality method] Peter wins
M	8000	Annual Company	Using [plurality method] Peter wins he also has the most 1st place
			votes.

POSSIBLE EXAMPLES

4. David wins every head-to-head matchup, but David does not win the election. (I.e., more voters prefer David to Matt, and prefer David to Christopher, and prefer David to Peter.)

one example: use the same example as in #2. (check corditions!)

(Also possible to find examples using Plur w/ ELIM.)

5. Matt wins. But if Christopher drops out of the race, and people rank the remaining candidates in the same order they did before, Matt doesn't win anymore.

a constant	10	9	use [plurality method]: Matt w	ine!
M	D	C	The state of the s	
C	Μ	D M	But what if Chrispopher drops ou	+ ?
	P	P	11 10 19 Now, using the	e Same
			P M M method (Plu	irality),
			DPP David wins	(not Matt).

Notes: For #5 it is possible to find an example with any voting method.

2) Don't confuse a candidate drapping out of the election, like C did above, with the plurality w/elim voting method. In Plur w/ Elim, we erase someone if no one got a majority and look at the ballots without their name. They don't actually leave the election and will still expect to tearn results. (Candidates do drap out of elections for

Once you finish all of these, go back and see if your example works with a different voting method than the one you chose. Try to determine which voting methods are possible, and which are impossible, in each scenario. For example, in problem 1, plurality method is impossible, because plurality method