Name:

MATH 1001, Voting Quiz, Spring 2003
Remember, there will be little or no partial credit given on questions in this quiz.

_____ (T/F: 2 Points) Using the Method of Pairwise Comparison with 100 candidates, we would have to do ${}_{10}C_2$ comparisons

FALSE: We would have to do ${}_{100}C_2$ comparisons. (This was actually a typo; I didn't mean to make you notice the difference between 10 and 100. Sorry.)

_____ (T/F: 3 points) When we say "The Borda Count Method violates the Majority Criterion," I mean that it is *impossible* for a candidate with a majority to win the election using the Borda Count Method.

FALSE: Sometimes such a candidate *will* win. But it's possible to have an election where that candidate might lose. See your textbook or your lecture notes for examples.

The rest of the questions refer to this preference schedule:

#	3	4	5
1^{st}	A	B	C
2^{nd}	B	A	A
3^{rd}	C	C	B

_____ (3 points) Which candidate wins with the Plurality Method?

C wins. C has 5 first place votes, more than any other candidate.

_____ (2 points) Who wins with the Plurality with Elimination Method?

A has the fewest first place votes and is eliminated in the first round. A's votes go to B, and B wins in the second round with 7 votes, compared to 5 for C.

_____ (3 points) There is a Condorcet Candidate here. Who is it?

A Condorcet candidate wins a head to head comparison against every other candidate. You can check that this is true for A here.

_____ (2 points) Who wins by the Method of Pairwise Comparisons? (Hint: you should not have to do any work for this question)

A Condorcet Candidate automatically (or, always, if you prefer) wins in the Method of Pariwise Comparisons. So A is the winner.