Math 111   Third Voting Worksheet
Print **all** group member's names here. Circle the name of the group member who will turn this in.

1. An election is held with the results shown:

	12	2	7	6	9
1st	A	C	D	B	C
2nd	B	D	C	D	B
3rd	C	B	B	C	D
4th	D	A	A	A	A

(a) Is there a Majority Candidate? If so, who? If not, why not?

(b) Which Candidate wins if the Pairwise Comparison Method is used? Show all the pairs, and give the pairwise points.

(c) Is there a Condorcet candidate? If so, who? If not, why not? (How many pairwise points are required to be a Condorcet candidate in this election?)

2. Construct an example of an election that has **100 voters** and four candidates:
   Cyberman (C), Dalek (D), the Sontaran (S), and Weeping Angel (W).

   a. The Cyberman is a majority candidate, and the Weeping Angel wins using Borda count. (Show how many Borda points both of these have.)

   b. The Dalek wins using the plurality method, but is not a majority candidate.

   c. The Dalek wins using plurality, but the Sontaran wins using plurality with elimination.