

Name: _____ score: _____ / 10

There are 10 points possible on this quiz. No aids (book, notes, etc.) are permitted. You may use a non-programmable calculator. **Show all work and supporting calculations for full credit. Explain how you get your answers.**

Do not write in the “write corrections here” boxes while you’re taking the main quiz.

1. (4 points) A state is holding elections for governor. There are four candidates (A, B, C, and D for convenience). The preference schedule is below.

number of voters	40	30	20	5	5
1st choice	B	C	D	D	B
2nd choice	A	A	A	C	C
3rd choice	D	D	B	A	A
4th choice	C	B	C	B	D

For each of the following, provide supporting calculations.

- (a) (1 point) How many voters voted in this election? _____

Write corrections here

- (b) (1 point) Find a winner under the plurality method. Show some work. _____

Write corrections here

- (c) (2 points) Find a winner under Instant Runoff Voting. _____

Show some work for each round and clearly state who gets eliminated.

Write corrections here

2. (6 points) Below is the same preference schedule.

number of voters	40	30	20	5	5
1st choice	B	C	D	D	B
2nd choice	A	A	A	C	C
3rd choice	D	D	B	A	A
4th choice	C	B	C	B	D

- (a) (2 points) Find a winner under the Borda Count method. Show some work. _____

Write corrections here

- (b) (2 point) In a one-to-one comparison, who is preferred, candidate A or candidate B? (You must show your calculation.)

Candidate _____ is preferred.

Write corrections here

- (c) (2 points) Fill in the your result from part (b) and determine the winner under Copeland's method. The results of each one-on-one comparison (except A vs B) are provided below.

The winner under Copeland's Method is _____

matchup	A vs B	A vs C	A vs D	B vs C	B vs D	C vs D
tally	A: B:	A: 60 C: 40	A: 75 D: 25	B: 65 C: 35	B: 45 D: 55	C: 35 D: 65
winner		A	A	B	D	D

Write corrections here