

Quiz 5
Friday, March 9.

NAME _____

1. (a) Explain the difference between sincere and strategic voting.

(b) Explain the Condorcet winner criterion.

(c) Explain the Pareto condition.

(d) Explain the independence of irrelevant alternatives.

(e) Explain monotonicity.

2. Your fly fishing club is attempting to decide where to go for the next day trip. The choices are Alder River (A), Boulder Pond (B), or Collie Creek (C). The preference rankings of the members are shown below.

	Number of votes			
	6	12	15	11
First choice	A	C	B	A
Second choice	B	B	A	C
Third choice	C	A	C	B

For each of the voting systems below, say which location will be chosen :

(a) Borda count.

(b) Sequential pairwise voting with agenda B,A,C.

(c) Hare system.

3. A seventeen-member committee must elect one of four candidates : R,S,T or W. According to their preference ballots as shown below, R wins using the plurality method. Could those members who most prefer W vote strategically in some way to change the outcome in a way that will benefit them? (explain)

	Number of voters			
	6	4	3	4
First choice	R	S	T	W
Second choice	S	R	S	T
Third choice	T	T	R	S
Fourth choice	W	W	W	R

4. There are 21 delegates at a political party's convention in which three people A,B and C have been nominated as the party's candidate for governor. The delegates' preference ballots are shown below. What nominee would be elected if the party uses a rank system that assigns 3 points for first place, 1 for second and 0 for last? Is the result different from that which results from a Borda count?

	Number of voters		
	10	5	6
First choice	A	B	C
Second choice	B	A	B
Third choice	C	C	A