Math 1116, Quiz #2, Spring 2013   Name _____KEY_____

Instructions: Show all work. Be sure to answer all parts of each question.

1. Consider the preference table below. Determine the winner of the election by the plurality with elimination method. Then use your results to rank all the remaining candidates.

	28	30	5	5	16	16
1st choice	A	C	A	C	B	B
2nd choice	B	B	C	A	C	A
3rd choice	C	A	B	B	A	C

$A = 28 + 5 = 33$ $A = 33 + 16 = 49$

~~$B = 32$~~ $C = 35 + 16 = 51$

$C = 35$

C wins,
A is 2nd
B is 3rd

2. Suppose that in the table above, the 5 voters that voted A first and C second, change their votes to C first and A second, as shown below. What is the result of the election now and does this violate the monotonicity criterion? Why or why not?

	28	30	10	16	16
1st choice	A	C	C	B	B
2nd choice	B	B	A	C	A
3rd choice	C	A	B	A	C

~~$A = 28$~~ $B = 32 + 28 = 60$

$B = 32$ $C = 40$

$C = 40$

B wins.

This does violate the monotonicity criterion because C received more first place votes than last time, but lost the election