Construction

Some people confuse plurality with majority. Give an example where Ovid's wins the plurality rule, but Ovid's does not have a majority:

Can't use just two columns.

	3	0	2	0	2	0
1st	Ovid's	Ovid's	K-Lair	K-Lair	Starbucks	Starbucks
2nd	K-Lair	Starbucks	Ovid's	Starbucks	Ovid's	K-Lair
3rd	Starbucks	K-Lair	Starbucks	Ovid's	K-Lair	Ovid's

How many total voters are there? 7

How many first places does each candidate get?
O 3
K 2
S 2

Who wins plurality? Ovid's 3 > 2

How many first place votes are needed for a majority? $\frac{7}{3} = 3.5$, so 4 are needed.

Ovid's has plurality(most), but not majority (more than half).

Some people confuse two elimination methods: plurality with elimination (least first place is eliminated) and survivor (most last place votes is eliminated). Construct a preference schedule where the two methods give different answers.

took me a few tries

	3	4	3	2
1st	Ovid's	Ovid's	K-Lair	K-Lair	Starbucks	Starbucks
2nd	K-Lair	Starbucks	Ovid's	Starbucks	Ovid's	K-Lair
3rd	Starbucks	K-Lair	Starbucks	Ovid's	K-Lair	Ovid's

How many first places does each candidate get?
O 4
K 3
S 2

Who got the fewest first place votes (including 0)? Starbucks

Who wins after they are eliminated?
O 4   4
K 3+2   5
S Elim   (K-Lair)

How many last places does each candidate get?
O 3+2
K 4
S 0

Who got the most last place votes? Ovid's

Who wins after they are eliminated?

(Starbucks)

        1st Last
O   Eliminated
K   3   4+2
S   4+2 3

Bracket methods

A bracket is a way to organize who goes head-to-head with who. A candidate is eliminated after any loss. The survivors are then paired up. The pairings are decided before any of the head-to-heads, so "the winner of this game will play the winner of that game" is ok, but "A won and B won, so let's have them play against each other" is NOT ok.
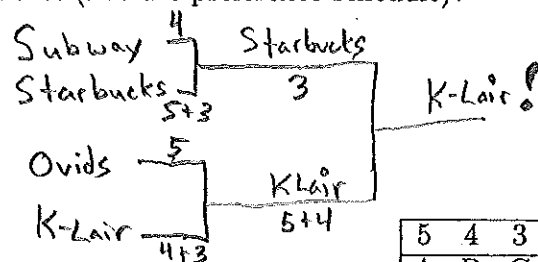
Here is a bracket for four candidates:
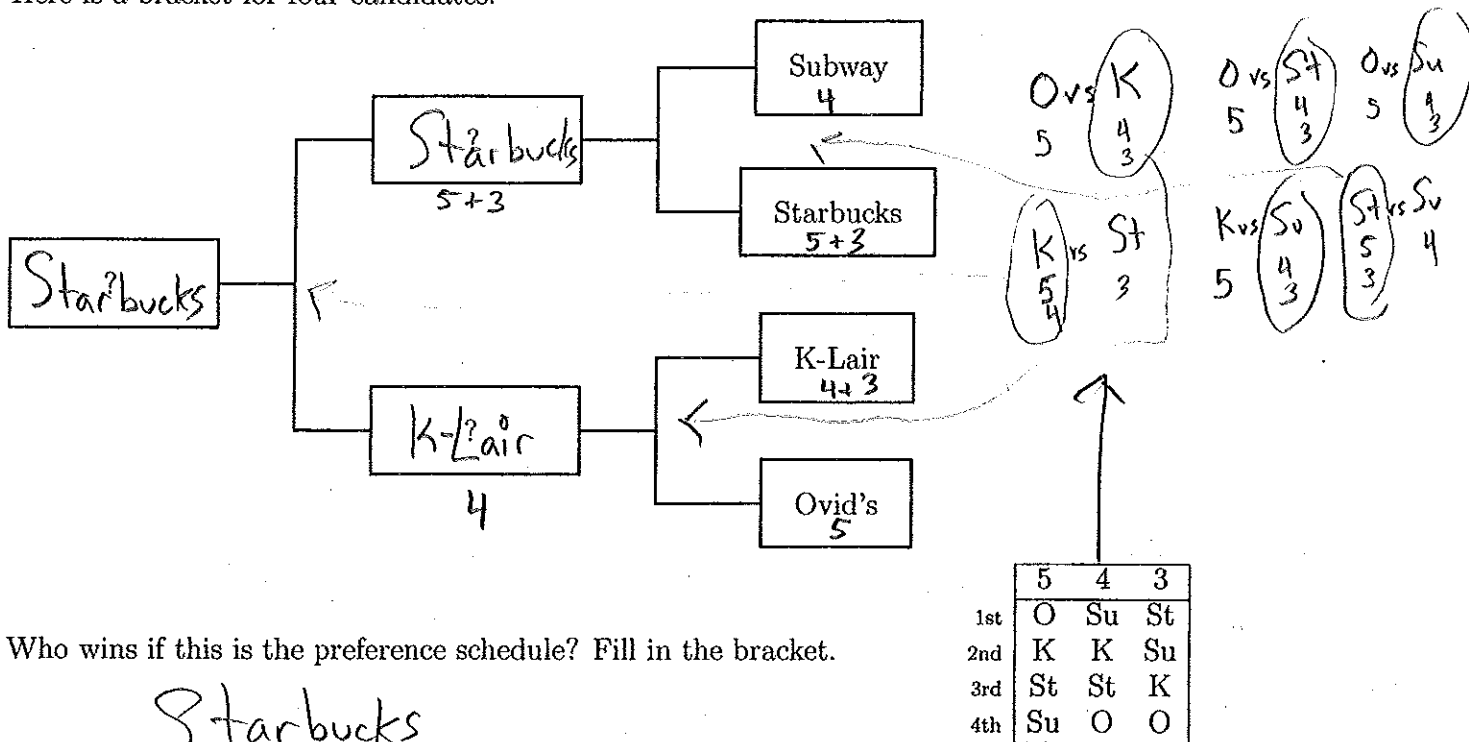
Who wins if this is the preference schedule? Fill in the bracket.
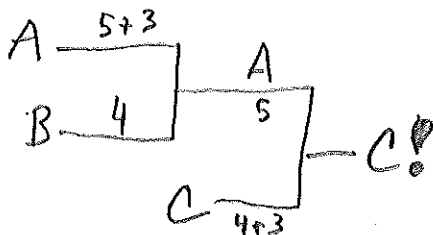
Starbucks

	5	4	3
1st	O	Su	St
2nd	K	K	Su
3rd	St	St	K
4th	Su	O	O

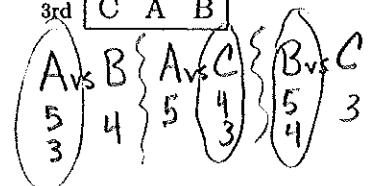Can you make K-Lair win by changing the original bracket (not the preference schedule)?

K-Lair Beats Starbucks and Ovid's but loses to Subway. Subway loses to Starbucks, so put them together!
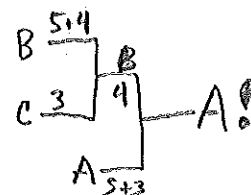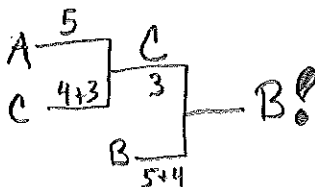

Draw a bracket for three candiadates. Who wins if this is the preference schedule?

	5	4	3
1st	A	B	C
2nd	B	C	A
3rd	C	A	B

Which candidates can win a bracket method? **Anybody!**