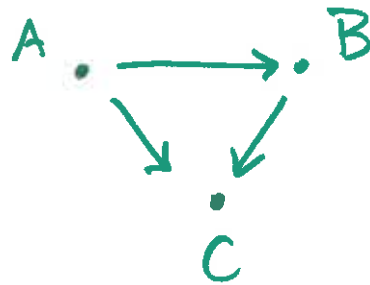


# Quiz 3 - Solutions

1. Consider the following preference schedule:

4	3	4	2
B	A	C	C
A	B	A	B
C	C	B	A



(a) Who wins by plurality? (1 pt)  $W_P = \{ \underline{C} \}$

(b) Is there a Condorcet Candidate? If so, who? Draw the Comparison graph on the right to justify your answer. (2 pts)

Circle one:  Yes  No      If yes, who? A

(c) Is Candidate C a spoiler for plurality? Explain. (2 pts)

No. C wins alone by plurality and cannot be a spoiler. Retro DQ crit (i)'

(d) Is Candidate B a spoiler for plurality? Explain. (2 pts)

Yes.  $B \notin W_P$ . When B is disqualified, new winner set is  $W_P' = \{A\} \neq W_P$ . B is a losing spoiler.

2. Circle T if the claim is true, F if the claim is false. (1pt each)

(a) Pairwise comparison can have losing spoilers.

T  F

(b) The runoff method satisfies the retroactive disqualification criterion.

T  F

(c) If there is a Condorcet candidate, then there are no spoilers for plurality.

T  F

(a) - HW, ch 3 extra exercise # 2

(b) - Book exercise (3.1)

(c) Book exercise (3.4)

WRITE YOUR NAME ON REVERSE.

Also, on this quiz A is a condorcet candidate and spoiler for plurality.