Quiz 6

1. Consider the following example for questions (a)–(e).

2	3	2	1	2
A	D	A	B	C
C	B	C	A	B
B	A	B	D	A
D	C	D	C	D
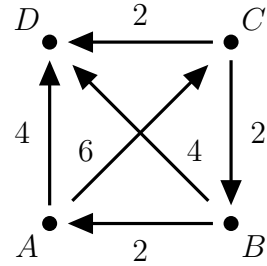
(a) (1 pt) What is the Smith set?

(b) (1 pt each) Fill in the winner set for:

- Runoff: $W_R = \{ \underline{\hspace{1.5cm}} \}$

- Plurality: $W_P = \{ \underline{\hspace{1.5cm}} \}$

- Pairwise comparison: $W_{PC} = \{ \underline{\hspace{1.5cm}} \}$

- a priori Smith fair Runoff: $W_R^S = \{ \underline{\hspace{1.5cm}} \}$

- a priori Smith fair plurality: $W_P^S = \{ \underline{\hspace{1.5cm}} \}$

- a priori Smith fair pairwise comparison: $W_{PC}^S = \{ \underline{\hspace{1.5cm}} \}$

(c) Which winner selection methods can we conclude are NOT a priori Smith fair from this example? Circle all that apply (1 pt):

        runoff   plurality   pairwise comparison

(d) List all beatpaths between A and C, with strengths. You may use shorthand notation from class. Does one of A or C lose by the beatpath method? (1 pt)

(e) List all beatpaths between A and B, with strengths. You may use shorthand notation from class. Does one of A or B lose by the beatpath method? (1 pt)

PLEASE WRITE YOUR NAME ON THE BOTTOM OF THIS PAGE

Name: _____