PRACTICE PROBLEMS 2̲

Topic: dominance

VERY IMPORTANT: do **not** look at the answers until you have made a VERY serious effort to solve the problem. If you turn to the answers to get clues or help, you are wasting a chance to test how well you are prepared for the exams. I will **not** give you more practice problems later on.

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1. In the dognapping story of Problem 1 of set 1, for each of the six games and for each player explain whether the player has a dominant strategy and whether the game has a dominant-strategy equilibrium.

2. In the road map game in Problem 2 of set 1, what strategies of Yvette are weakly dominated? What strategies of Zoe are weakly dominated? (Assume that each player strictly prefers winning to losing.)

3. Consider the following game:

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		a	b	c	d	e	f
	A	2 , 1	2 , 1	2 , 1	4 , 0	4 , 0	4 , 0
1	B	2 , 1	2 , 1	2 , 1	4 , 0	4 , 0	4 , 0
	C	2 , 0	3 , 2	1 , 2	2 , 0	3 , 2	1 , 2
	D	2 , 0	3 , 2	0 , 3	2 , 0	3 , 2	0 , 3

(a) Does player 1 have a dominant strategy?
(b) Does player 2 have a dominant strategy?
(c) Is there a dominant-strategy equilibrium?
(d) Does player 1 have any dominated strategies?
(e) Does player 2 have any dominated strategies?

4. For each of the three games between Antonia and Bob of Problem 3 of set 1, for each player and for every pair of strategies, state whether one strategy dominates the other (specify if it is weak or strict dominance). Does Antonia have a dominant strategy? Does Bob have a dominant strategy? Is there a dominant-strategy equilibrium?