Microeconomics - Chapter 7

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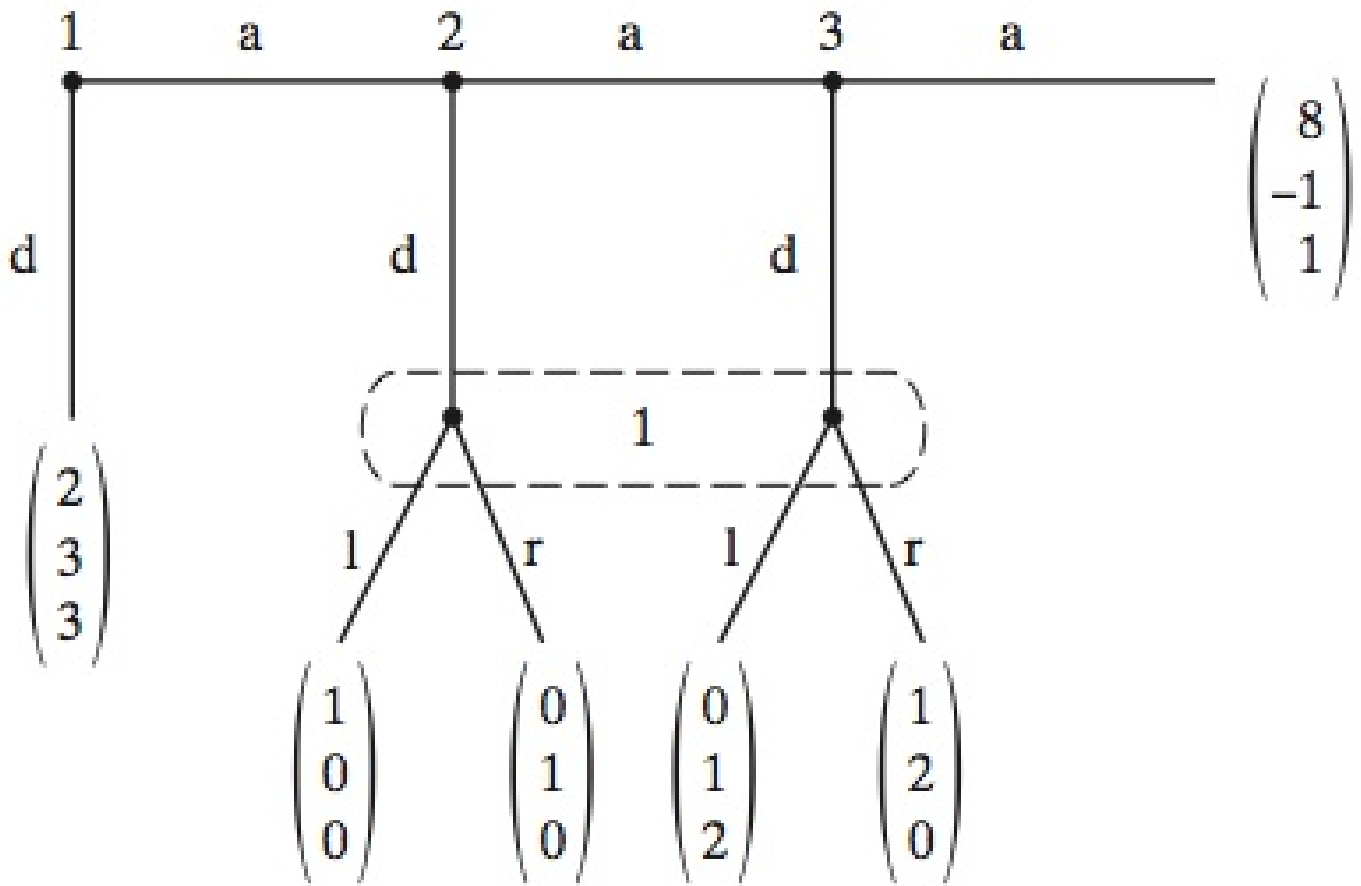
Chapter 7:
Game theory - Exercises

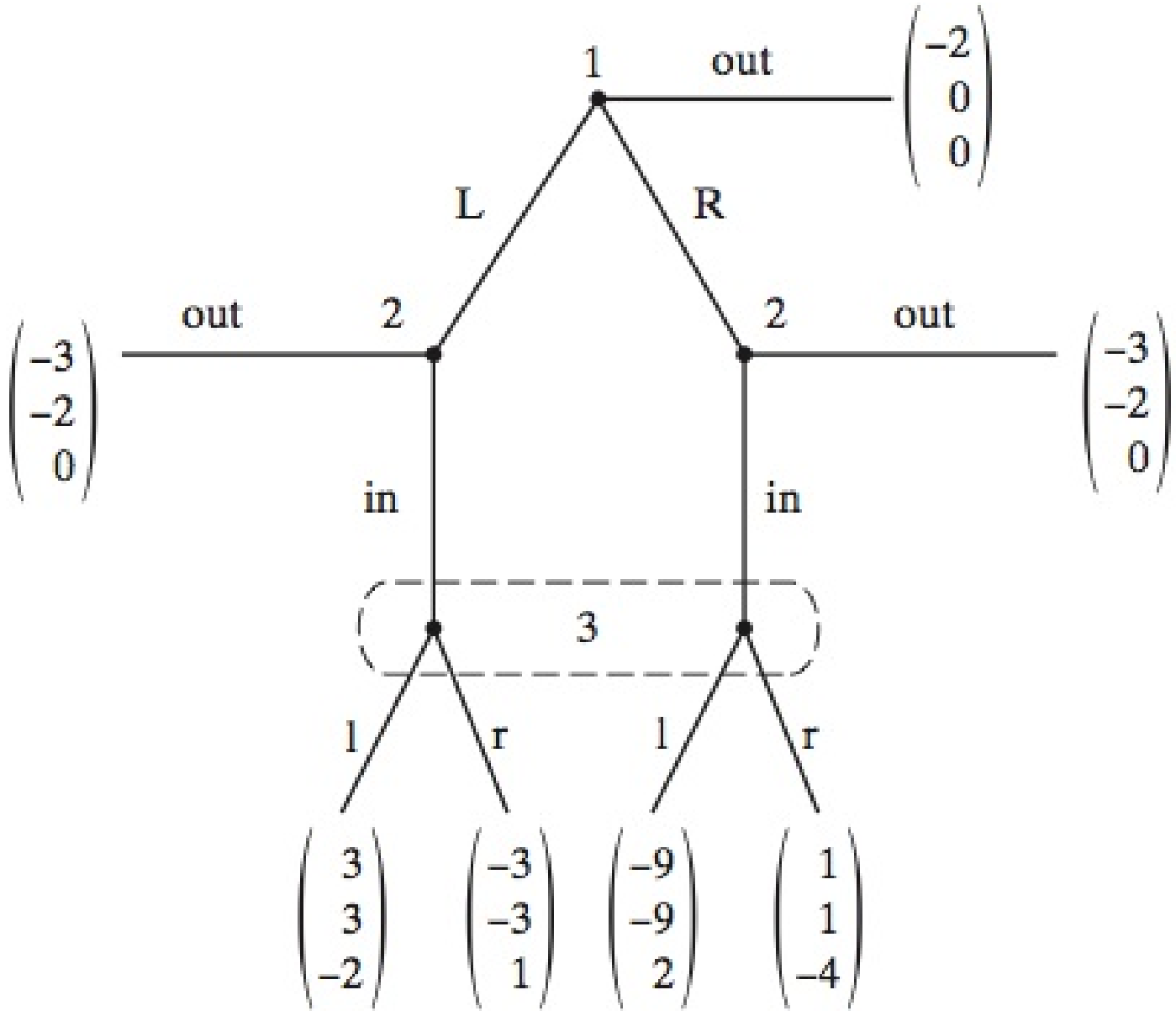
Exercise 7.48



Consider the extensive form game above. Each of players 1, 2, and 3 can play down (d) or across (a), and player 1 can also play left (l) or right (r).

1. Identify all subgames.
2. Find a pure strategy subgame perfect equilibrium, b, such that (p, b) is not sequentially rational for any system of beliefs p.
3. Find an assessment, (p, b), that is sequentially rational and satisfies Bayes' rule in every subgame.

Exercise 7.49



Consider the extensive form game above.

1. Find a subgame perfect equilibrium in which player 1 plays out' with probability one.
2. Prove that there is no sequentially rational assessment in which player 2 plays out with probability one at each of his information sets.
3. Find a sequentially rational assessment satisfying Bayes' rule.

Exercise on Bayesian games

	BL	M
BL	$2 + t_1, \quad 1$	$0, \quad 0$
M	$0, \quad 0$	$1, \quad 2 + t_2$