EVOLUTION AND THE THEORY OF GAMES

Exercises 18-4-2013

- 25. Consider a game of two players depicted in Figure 1.
- (a) (3 points) What are the (pure) Nash equilibria of the game? Hint: write the strategies for player 1 as "if at the first node play x, if at the third node play v".
- (b) (3 points) How many subgames does the game have?
- (c) (3 points) What are the SPNE?

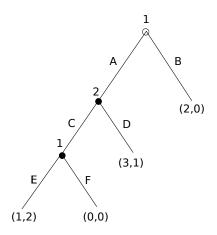


FIGURE 1.

26. (4 points) Consider the game-tree depicted in Figure 2. In the lecture we calculated the pure Nash equilibria and the THPNE. Are there any FSPNE?

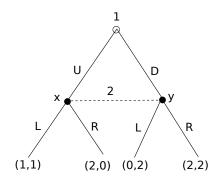


FIGURE 2.

- **27.** Consider the game depicted in Figure 3.
- (a) (3 points) What are the pure Nash equilibria?
- (b) (3 points) How many subgames there are?
- (c) (3 points) What are the SPNE?
- (d) (3 points) What are the FPNE?
- (e) (3 points) What are the TPNE?

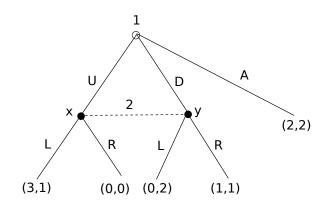


FIGURE 3.