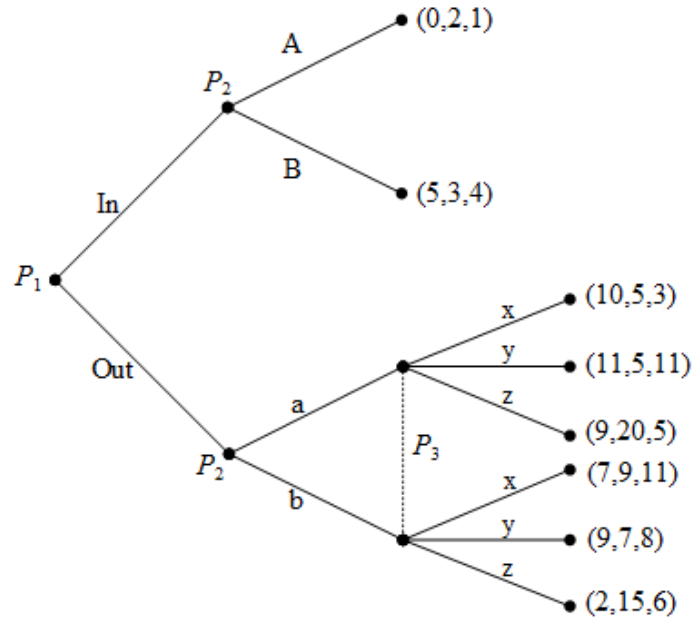


EconS 503 - Microeconomic Theory II
Homework #3 - Due date: February 22th, 2021

1. **[Finding NE and SPNE]** Consider the following game tree.



- (a) Define the strategy spaces for players 1, 2 and 3.
 - (b) Using your results in part (a), represent the game in matrix form.
 - (c) Using your results from part (b), find the Nash equilibria (NEs) of this game.
 - (d) Let us consider again the game tree. Identify all subgames of this game.
 - (e) Using your results from part (d), find the Subgame Perfect Nash equilibria (SPNEs) of this game.
 - (f) Compare the set of NEs and SPNEs. Which NEs are based on incredible threats? Interpret.
2. Exercise 8.16 in Advanced Microeconomic Theory, MIT Press.
3. **Exercises from Tadelis:**
- Chapter 7: Exercise 7.9
 - Chapter 8: Exercises 8.6, 8.9, and 8.13.