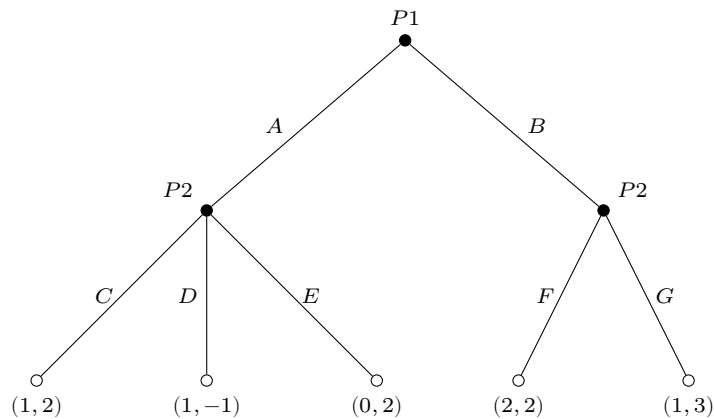


# Problem Set

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1. Consider the following game:



- (a) (10 points) List all possible strategies form Players 1 and 2.

**Solution:**

The sets of strategies for players 1 and 2 respectively are  $S_1 = \{(A), (B)\}$ , and  $S_2 = \{(C, F), (C, G), (D, F), (D, G), (E, F), (E, G)\}$ .

- (b) (5 points) List two strategy profiles for this game.

**Solution:** It is a set of strategies for each game,  $(s_1, s_2)$  with  $s_1 \in S_1$  and  $s_2 \in S_2$ .

- (c) (5 points) Find the Nash Equilibrium in pure strategies of this game.

**Solution:** The Nash Equilibria are  $(A, (C, G))$ ,  $(B, (C, G))$ , and  $(B, (E, G))$ .

2. (15 points) Consider the following game tree: