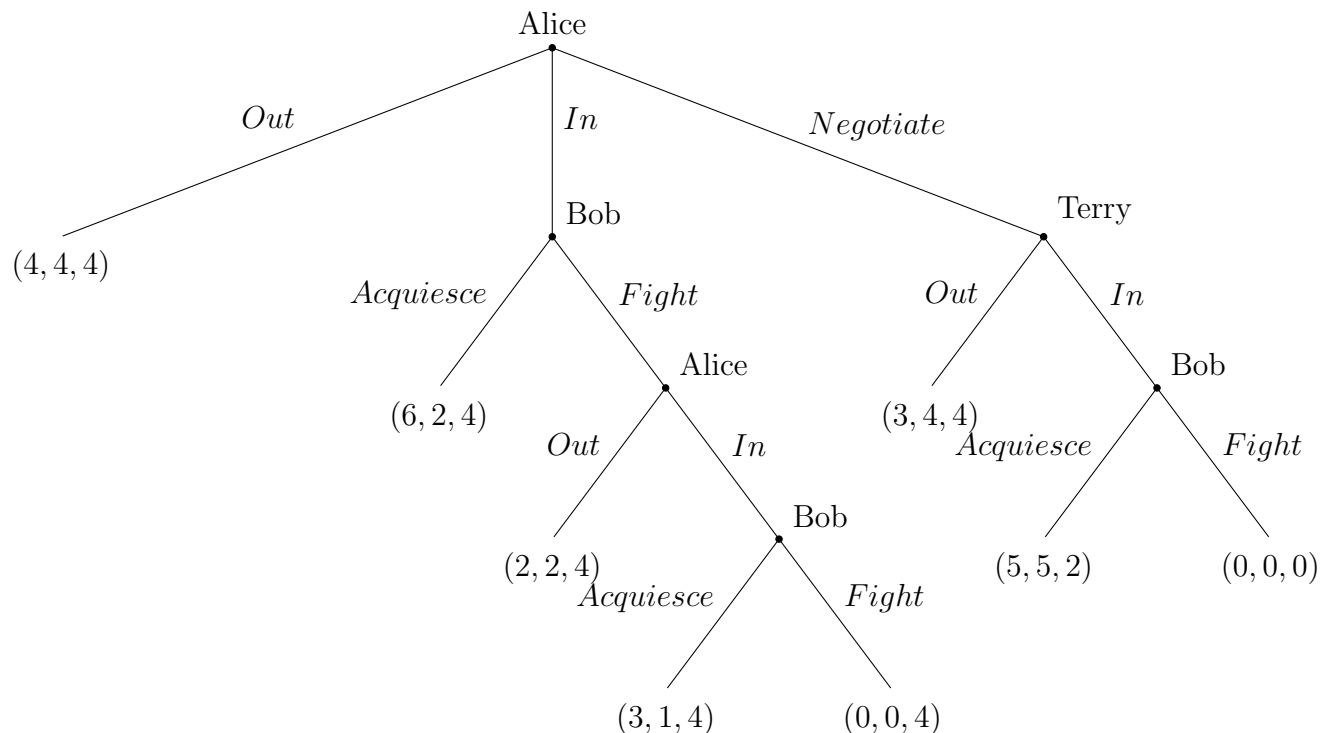


A



Consider the above game tree. Alice's payoff is shown first, then Bob, then Terry.

1. How many strategies does each player have?
2. List all the strategies available to each player?
3. Find the rollback equilibrium(a) for this game and list the strategy played by each player.

B

Leo, Janelle, and Bert all have gambling problems but no nearby casino. Each agrees to put \$10 in a hat and toss a coin. Bert, being the worst at math, wins if all coins land on tails. Leo wins if the coins all land on heads. Janelle wins if two of the coins land on heads and one lands on tails. The coin lands on heads with a probability of $2/3$, and the winner receives a net payment of \$20, and the losers lose their \$10. Assume the money is lit on fire when no one wins. (You can leave answers as fractions if you prefer.)

1. What is the probability that Bert wins? Leo? Janelle?
2. What is Bert's expected payoff? Leo's?
3. Is this a zero-sum game?