hw3_games_q9_rationality_of_utilities

Question 9: Rationality of Utilities

3/3 points (ungraded)

Part 1

Consider a lottery $L = [0.2, A; 0.3, B; 0.4, C; 0.1, D]$, where the utility values of each of the outcomes are $U(A) = 1, U(B) = 3, U(C) = 5, U(D) = 2$. What is the utility of this lottery, $U(L)$?

3.3 ✔

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✔ Correct (3/3 points)

problem

3/3 points (ungraded)

Part 2

Consider a lottery $L1 = [0.5, A; 0.5, L2]$, where $U(A) = 4$, and $L2 = [0.5, X; 0.5, Y]$ is a lottery, and $U(X) = 4, U(Y) = 8$. What is the utility of the the first lottery, $U(L1)$?

5 ✔

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problem

3/3 points (ungraded)

Part 3

Assume $A \succ B$, $B \succ L$, where L = $[0.5, C; 0.5, D]$, and $D \succ A$. Assuming rational preferences, which of the following statements are guaranteed to be true?

- [x] $A \succ L$
- [x] $A \succ C$
- [ ] $A \succ D$
- [x] $B \succ C$
- [ ] $B \succ D$

✔

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