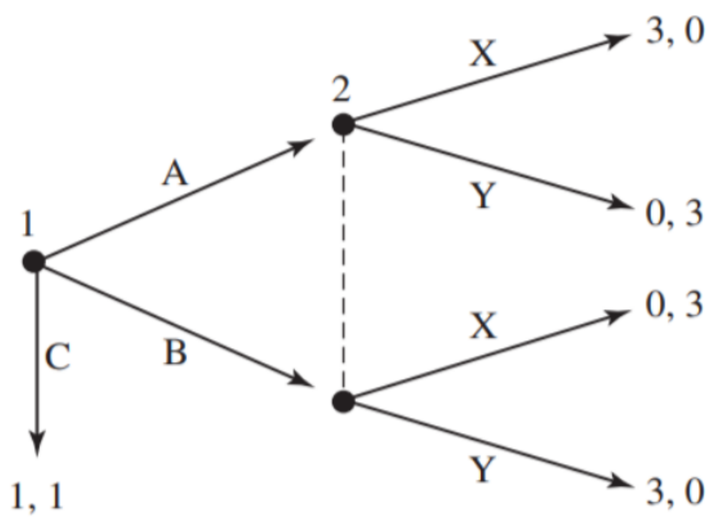
HW 6.6

Saturday, September 5, 2020 2:39 PM

Passed Solution review

6. In the game pictured here, is it ever rational for player 1 to select strategy C? Why?



If Player 1 wants a guaranteed Payoff, they would choose strategy C.

But, mathematically, they would choose A or B because the expected Payoff value is 1.5

$AX = BY$ + $AY = BX$

By eliminating C, a mixed a+b generates 1.5

Let P denote Player 1's belief about Probability of X

$u_1(C,P) \geq u_1(A,P)$
$1 \geq 3P + 0(1-P)$
$1/3 \geq P$

$u_1(C,P) \geq u_1(B,P)$
$1 \geq 0P + 3(1-P)$
$1 \geq 3 - 3P$
$P \geq 2/3$

NO because P cannot satisfy both inequalities