HW 22.3

Wednesday, November 11, 2020 12:13 PM

Passed Solution review

3. Consider the following stage game.

1 \ 2	X	Y
A	5, 6	0, 0
B	8, 2	2, 2

(a) Find and report all of the (pure-strategy) Nash equilibria of this game.

(B, X) and (B, Y)

(b) Consider the two-period repeated game in which this stage game is played twice and the repeated-game payoffs are simply the sum of the payoffs in each of the two periods. Is there a subgame perfect equilibrium of this repeated game in which (A, X) is played in the first period? If so, fully describe the equilibrium. If not, explain why.

If (A,X) is played in round one, then they will stay there for round 2. If player one deviates, player two will play Y in round two. No matter what, player one will play A in round 1 and B in round 2.