

Day 6: Homework

Question 1: In class, we calculated that your mixed Nash equilibrium strategy for this game:

	you DRIVE	you SHOOT
opponent BACK	(50,50)	(20,80)
opponent JUMP	(10,90)	(80,20)

was for you to DRIVE with probability 0.6, and SHOOT with probability 0.4.

Calculate your opponent's mixed Nash equilibrium strategy. Remember that a mixed strategy for your opponent means a probability q of choosing JUMP, and a probability $1 - q$ of choosing BACK. Remember that your opponent's mixed Nash equilibrium strategy should make your payoffs for DRIVE and SHOOT equal.

Question 2: Consider the dating game,

	♂ Monkey King	♂ Zootopia
♀ Monkey King	(2,1)	(0,0)
♀ Zootopia	(0,0)	(1,2)

There are two pure strategy Nash equilibria and one mixed strategy Nash equilibrium. Find them all.