

Review questions for the exam for ECON 477.

The review sheet is all of the help sheets.

1) (45 points) Find all Nash equilibria in the following matrix. Prove that you found all and prove they are Nash equilibria. Does either firm have a dominant strategy? Explain your logic. Find the cooperative equilibrium. Explain how you found it. What are the two players' secure strategies? How did you find them?

Payoff Matrix		Sony		
		High price	Medium Price	Low Price
Yamaha	High Price	25 19	24 36	22 33
	Low Price	7 18	20 11	23 35

2) (30 points) Create a 2x2 payoff matrix which has no Nash equilibrium. Prove it has no equilibrium.

3) (15 points) We have only examined one-shot Nash games. Repeated games, where you play against the same opponent over and over again (like two firms selling products) have different results. Explain why repeating the game makes a difference.

4) (10 points) If I gave you a 7x13 payoff matrix, then what is the maximum number of Nash equilibria we could have assuming all numbers are different? Explain your logic.