

Practice Questions.

1. *Pricing Strategies (make sure you are familiar with the various strategies we discussed including price discrimination and bundling).*

- (i) Describe what is meant when a firm engages in bundling. Distinguish between pure bundling and mixed bundling
- (ii) Consider a firm that has zero marginal cost of production for the two products it sells, namely washing machines and tumble dryers. There are 4 customers each with the valuation indicated in the table below:

Customer	Washing Machine	Dryer
Arnie	900	100
Beatrice	800	600
Colm	600	600
Doris	100	900

What is the monopolist's profit maximizing (uniform) price for the washing machine and dryer separately? What is the profit maximizing price if a pure bundle is offered? Choose from among the following three options:

- (a) $P_w=900$; $P_D=900$; $P_B=1000$.
- (b) $P_w=600$; $P_D=600$; $P_B=1200$
- (c) $P_w=600$; $P_D=600$; $P_B=1000$

What is the monopolist's profit maximizing (uniform) price for the washing machine and dryer separately and the bundle if a mixed bundling strategy is used? Choose from among the following three options

- (a) $P_w=100$; $P_D=100$; $P_B=1000$.
- (b) $P_w=600$; $P_D=600$; $P_B=1200$
- (c) $P_w=900$; $P_D=900$; $P_B=1200$

Which strategy generates the highest profit?

2. *Game Theory (make sure you are familiar with the various strategies we discussed including price discrimination and bundling).*

- (i) Consider the game below:

		Bob	
		Left	Right
Alice	Up	(1, 3)	(3, 2)
	Down	(4, 1)	(2, 4)

Find all the equilibria in this game.

What is the subgame equilibria if this is a sequential game with Bob moving first.

3. *Strategic Commitments*

- (i) Describe what is meant by a soft commitment by a firm. What might be an example of a soft commitment under Bertrand and Cournot competition?
- (ii) Using a set of diagrams, show how a soft commitment might harm a firm and that it should only be undertaken if the strategic effect makes it worthwhile to do so.

4. *Price discrimination*

- (i) What is required for firms to undertake third degree price discrimination? Give two examples of third degree price discrimination and explain the intuition behind third degree price discrimination.
- (ii) With menu pricing it is commonly assumed that firms do not need to identify what type a particular customer is, or prevent resale. Explain.

5. *Make sure you are familiar with the following concepts*

- Different types of barriers to entry (see lecture 3 and associated reading).
- Different types of market structure including their characteristics (see lecture 3 and associated readings).
- Solutions to game theory problems including games in which players make choices simultaneously or sequentially (lecture 4).
- Mixed strategy equilibrium in games, especially the example covered in lecture 4 with Airbus and Boeing (lecture 4).
- How repeated interaction might change the outcome of games (lecture 4).
- First, second and third degree price discrimination (lecture 5).
- Transaction costs including the different types (lecture 6).
- Product differentiation (lecture 6).
- Different views of the firm (see lecture 7 and article by Hart)

Also, please read the news (and other) articles available on canvas including:

Hart, O., (1989), 'An Economist's Perspective on the Theory of the Firm', *Columbia Law Review* 89(7), pp. 1757-74.

Daripa, A. and S. Kapur (2001), 'Pricing on the internet', *Oxford Review of Economic Policy* 17(2), pp. 202-16..