

# MICRO-Economics

Friday, 08. April 2005 (45 min.)

Please note:

- First check the exam paper: are there 5 pages / all pages well readable?
- Please use the boxes for your answers. Please do not use own paper.
- The complete solution method must be traceable!
- They can achieve **45 points** – in 45 minutes! => one point is approximately worth one minute; please consider the indicated scores. The tasks are formulated that way, that usually short answers are required. **Care of your time management** (it turned out to be a crucial problem in the last exam) - do not spend too much time with "inferior" tasks!
- Permitted are: Pens, ruler, calculator (without word processing function), dictionary German/English.
- Please do not use a pencil (except in diagrams) nor red pens
- Mobile Phones have to be switched off !

**Good Luck !**

<b>Name:</b>																				
<b>First Name:</b>																				
<b>MatrikelNo:</b>																				

*Please do not enter anything below here:*

No. / Points:	
1.	(7)
2.	(7)
3.	(16)
4.	(15)
<b>Teil-Σ</b>	<b>(45)</b>

Mark
Date:
Signature:

## 1 The invisible hand

[7 points]

1.1 Who invented the metaphor of the “The Invisible Hand of the Marketplace” / approximately when? [2 pt]

*(A metaphor (German: Metapher) is a figurative way to describe something)*

1.2 Describe the meaning of this metaphor. What do we learn from it for economic analysis? [5 pt]

## 2 Objectives of Economic Policy

[7 points]

2.1 What is the Principal objective of any economy / government? Explain/define this concept briefly.[3 pt]

2.2 Which (sub-) targets have to be taken into account? Name and discuss these in the context of efficiency and equity. [4 pt]

3 A **monopolist** faces the following situation:

[16 Points]

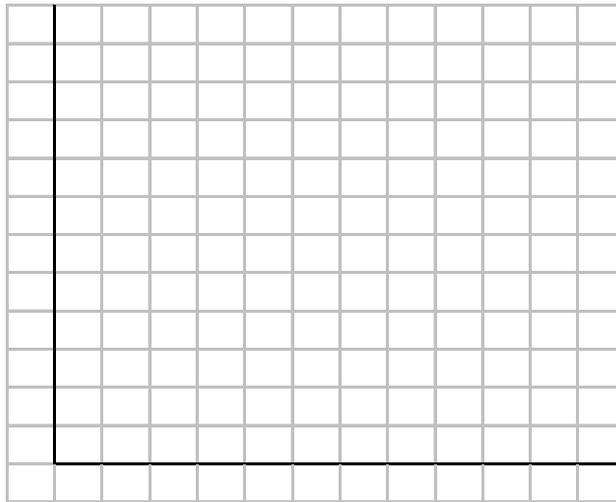
$$\text{AR: } p = 8000 - 2q \quad \text{Cost function: } TC = 1000 + 2q^2$$

a) Show this situation in a diagram:

- Average Return AR,
- marginal Costs MC,
- marginal return MR and
- the Cournot point.

[6 Points]

(Remember to draw exactly and also remember to properly label the axes).

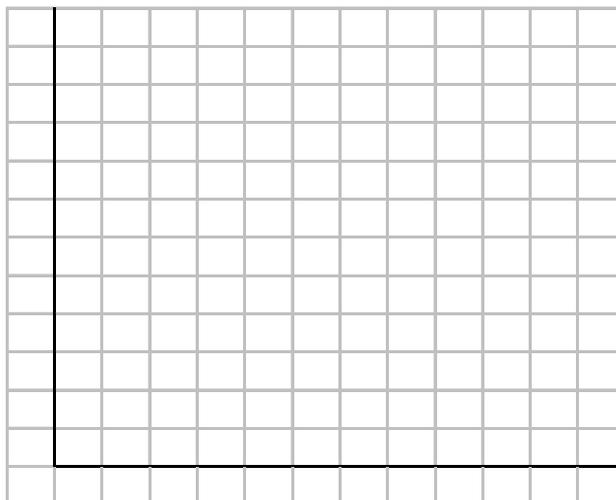


b) Calculate the optimal profit

[4 Points]

c) Compare the welfare (measured in consumers and producers surplus) in monopoly and in Perfect Competition. (Remember to draw exactly and also remember to properly label the axes).

[6 Points]



( 16 )

4 The following shows the **demand equation** for a product:

[15 points]

$$q^d = 500 - 5p \text{ where } p \text{ is price in } \pounds$$

4.1 Create a demand schedule in the table below and show total revenue (TR):

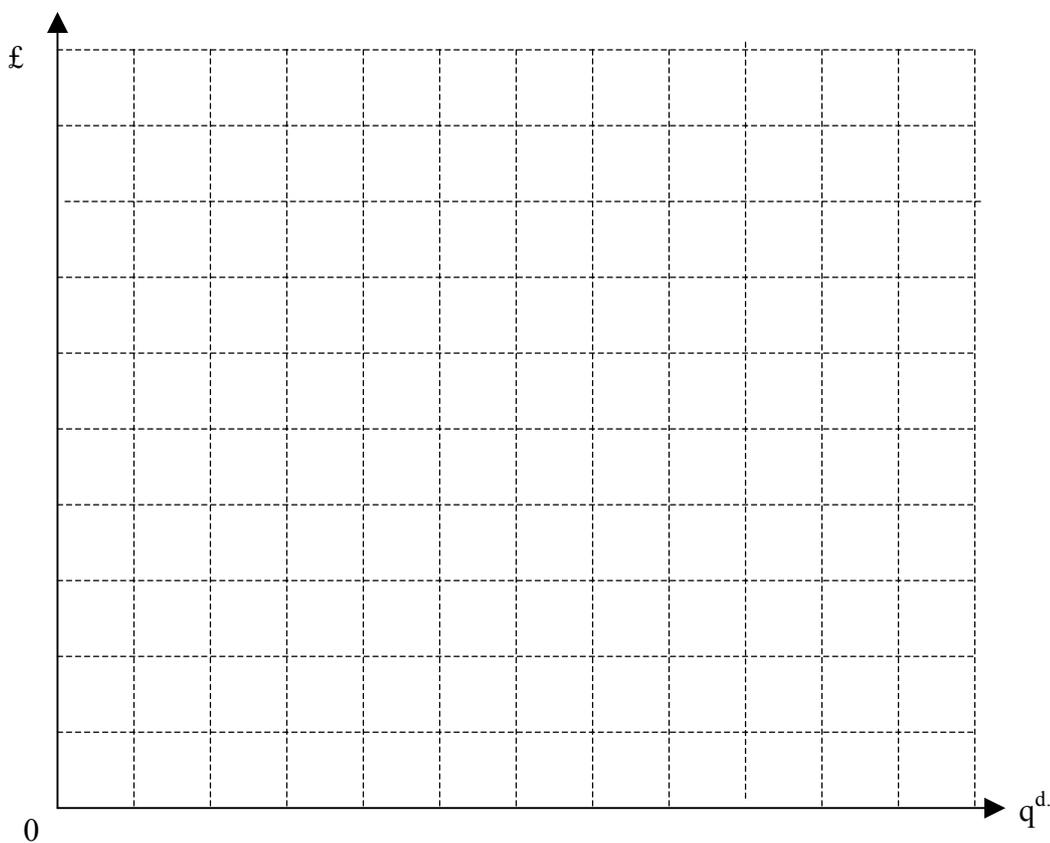
[3 pt]

Price	0	10	20	30	40	50	60	70	80
$q^d$									
TR									

$q^d$  = quantity demanded

4.2 Plot the demand curve from your schedule on the graph below:

[3 pt]



4.3 Show which part of the demand curve might be elastic and which might be inelastic.

[3 pt]

4.4 If the price increases from £30 to £40 per unit what is the price elasticity of demand? (Name, characteristics?) [3 pt]

4.5 Calculate the price elasticity of demand for a change in price from £70 to £80. (Name, characteristics?) [3 pt]