# A firm producing exclusive yachts – being **monopolist** in its market segment - faces the following situation: *(prices in 1 000 $ but just use the numbers below)*

AR: p = 1 000 – 20 qCost function: TC = 1000 + 5 q²

## a) Show this situation in a diagram: → Average Revenue AR, → marginal Costs MC, → marginal revenue MR and → the Cournot point. (Remember to draw exactly and also remember to correctly label the axes).



b) Compare the welfare) in monopoly and in Perfect Competition.   
(in the graph - remember to draw exactly and also to correctly label the axes).

c) Interpret the result in your own words.

Extra-task: Calculate the optimal profit

# A pizzeria intends to increase revenues. There are fixed costs of 5000 and variable costs of 2.00 per pizza. Currently 6 000 pizza are sold at a price of 5.00 Euro. Market research shows that the demand would be 6 300 at a price of 4.80 Euro and 5 700 pizza at a price of 5.20 Euro. [9 points]

a) What is the price elasticity of demand? Is demand elastic or inelastic? [2 *points*]

 = q/q / p/p = 300 / 6000 **/** -0,02 / 0,50 = 5 % / – 4 % = **– 1,25** or

 = q/q / p/p = -300 / 6000 **/** 0,02 / 0,50 = – 5 % / 4 % = **– 1,25**

b) Do you recommend an increase or a decrease of prices? Explain why. [2 *points*]

decrease  
because the demand is elastic (quantity-reaction > price-reaction)

c) Compute the profit before and after the change you recommended in b). Is increasing the revenue a good strategy from point of view of profit? [3 *points*]

d) Sketch a typical demand curve and show the elastic and inelastic parts and explain why this is the case for normal demand functions. [2 *points*]

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