MICROECONOMICS I (MODULE A) **9/12/2010**
HOMEWORK – CLASS #9 (due 13/1/2011)

Problem #1 (2 points)
As a market analyst you have been asked to come up with the possible scenarios regarding the change in demand for the products of a large company producing sweets. You have the following data regarding three target groups:

Group	market share	price elasticity of demand	income elasticity of demand	cross-elasticity (influence of the change in the price of substitutes)	cross-elasticity (influence of the change in the price of complements)
Pensioners	30%	-1.6	1.3	0.6	-0.2
families with children	50%	-1.2	0.4	1.3	-1.9
young people	20%	-0.6	-2	3	-1.2

You are expecting the following changes in the market (all of them or only some of them will materialize):
- competing firms will decrease the prices of their products by (on average) 20%;
- pensioners' incomes will increase by 15%;
- incomes of other groups will fall by 10%;
- there is a contract between your company and a movie theater regarding the sale of your product. Theaters decrease the prices of tickets by 15%;
- there is no decision at your company as regards a 10% increase or a 10% decrease of prices.

Provide the most optimistic and the most pessimistic scenario. What could happen in between? Specify the change in revenue (sales) of your company for every scenario. Formulate your conclusions.

Problem #2 (2 points)
Determine whether the following statements are true or false and provide a reasoning:
a) The price of food increased by 10%, while the disposable income of the consumer increased by 5%. As a result of these changes a consumer who earlier spent half of his disposable income on food will be neither better nor worse off.
b) The increase of all prices by *x*% maintaining income at an unchanged level will have the same effect as a decrease in income by *x*% maintaining all prices at a unchanged level.

Problem #3 (2 points)
On the basis of "real-life" data given below assess changes in the economic situation of Polish households during the period 1990-1992. The average income per capita of a household amounted to 563 000 *zloty* in 1990 and 1 428 000 *zloty* in 1992.

Groups of goods	Price index in 1992 (1990 = 100)	Percentage share of expenses for given groups of goods	
		1990	1992
Total	217,0	100,0%	100,0%
Food	196,2	48,8%	39,0%
Clothing	260,7	11,2%	8,2%
Other	225,8	40,0%	52,8%

a) Calculate price and quantity indices.
b) Analyze the problem using the Slutsky equation.