## MICROECONOMICS 3 CLASS #1

# PARTIAL EQUILIBRIUM IN THE FINAL GOODS MARKET

#### Problem #1

Color pencils are one of the most important goods in a certain university town. The table below presents the quantity of pencils demanded by students and offered by suppliers in this town.

Price (per unit in <i>zloty</i> )	Demand (in units)	Supply (in units)
1.2	0	30
1.0	10	25
0.8	20	20
0.6	30	15
0.4	40	10
0.2	50	5

- a) Present the demand and supply functions in the market for pencils graphically.
- b) Find the equilibrium price and quantity in the market for pencils.
- (...)
- e) Find the market equilibrium price for the situation when for every price level students are willing to purchase two times more pencils than previously.
- f) Find the market equilibrium price for the situation when for every price level suppliers are willing to offer 10 pencils less than previously.

#### Problem #3

The demand function for fresh bread in a little village initially took the form of Q(p) = 480 - 6p, while the supply function was Q(p) = 120 + 3p, where *p* stands for the price per loaf in *pesos*. In consequence of immigration of new inhabitants to the village demand increased by 10% for each price level. As a result of an unsuccessful harvest supply decreased by 15% for each price level.

- a) Find the formula for the new demand function for bread.
- b) Find the formula for the new supply function for bread.
- c) Find the new equilibrium price and quantity of bread sold in the village.
- d) Find the elasticity of demand and supply for the new equilibrium price level.

## Problem #7

The inverse demand function for the "Workouts in Intermediate Macroeconomics" takes the form of P(q) = 630 - 5q, while the inverse supply function is P(q) = 70 + 3q, where q stands for quantity of "Workouts...".

- a) Find the equilibrium price in the market for "Workouts...".
- b) Find the elasticity of demand for the equilibrium price level.
- c) Find the market equilibrium price for the case when during the exam session the demand for "Workouts..." doubled for every price level.