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 *zloty*)	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.
(...)