

①

A1 a) 1

b) 2

c) 1

d) 2

e) 2

A2. (e)

A3. (d)

GEMA. r:

$$r_1 \quad Q_{D1} = \alpha + \beta P$$

$$P_1 \quad Q_1 = 200$$

$$\Delta Y\% = 20$$

$$E_Y = 5$$

$$\Delta P\% = 20$$

$$E_P = -0,5$$

$$Q_3 = ;$$

$$\begin{array}{l} P_1 \quad Q_1 \quad Y_1 \quad \left. \vphantom{\begin{array}{l} P_1 \quad Q_1 \quad Y_1 \end{array}} \right\} E_Y \\ P_1 \quad Q_2 \quad Y_2 \quad \left. \vphantom{\begin{array}{l} P_1 \quad Q_2 \quad Y_2 \end{array}} \right\} E_Y \\ P_2 \quad Q_3 \quad Y_2 \quad \left. \vphantom{\begin{array}{l} P_2 \quad Q_3 \quad Y_2 \end{array}} \right\} E_P \end{array}$$

$$E_Y = \frac{\Delta Q\%}{\Delta Y\%} \Leftrightarrow 5 = \frac{\Delta Q\%}{20} \Leftrightarrow$$

$$\Leftrightarrow \Delta Q\% = 100$$

$$E_P = \frac{\Delta Q\%}{\Delta P\%} \Leftrightarrow -0,5 = \frac{\Delta Q\%}{20} \Leftrightarrow \Delta Q\% = -10$$

$$\Delta Q\% = 100 \Leftrightarrow Q_2 = 2Q_1 \Leftrightarrow Q_2 = 400$$

$$Q_3 = Q_2 - \frac{10}{100} Q_2 = 0,9 Q_2 = 0,9 \cdot 400 \Leftrightarrow \underline{\underline{Q_3 = 360}}$$

②

$$r_2 \quad Q_{D2} = 600 - 20P \quad P_1 // D_2$$

Ενεργή $D_1 // D_2$ 16x5x $Q_{D1} = 400 - 20P$

~~4000-20P~~

$$r_{1A} \quad Q = 400 \quad \textcircled{A} \quad 400 = 600 - 20P \Leftrightarrow \\ \Leftrightarrow 20P = 200 \Leftrightarrow P = 10$$

$$r_{1A} \quad P = 10, Q = 200 \text{ και } \sigma = -20$$

Q_{D1} :

$$200 = 400 - 20 \cdot 10 \quad \textcircled{A} \quad 400$$

$$\underline{Q_{D1} = 400 - 20P}$$

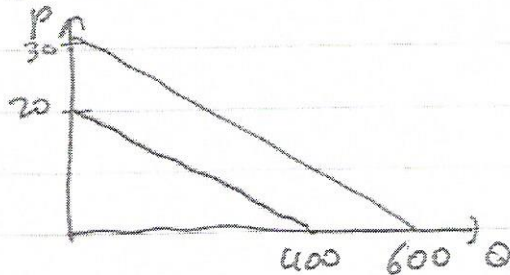
$$r_3 \quad \underline{Q_{D1} = 400 - 20P} \quad \underline{Q_D = 600 - 20P}$$

$$r_{1A} \quad P=0 \rightarrow Q=400$$

$$r_{1A} \quad P=0 \rightarrow Q=600$$

$$r_{1A} \quad Q=0 \rightarrow P=20$$

$$r_{1A} \quad Q=0 \rightarrow P=30$$



(3)

r4) - Επίδραση βραδερών: εισοδήματος
- Επίδραση υποκατάστατων αγαθών

$$\begin{array}{lll} r5) & P_1 = 5 & Q_1 = 500 & ED_1 = 2500 \\ & P_2 = 15 & Q_2 = 300 & ED_2 = 4500 \\ & & \Delta ED = 2000 \end{array}$$

$$ED = \frac{300 - 500}{15 - 5} \cdot \frac{5}{500} = \frac{-200}{10} \cdot \frac{1}{100} = -0,5$$

$$|G| < 1 \rightarrow \left. \begin{array}{l} |\Delta Q_i| < |\Delta P_i| \\ p \neq \end{array} \right\} ED \neq$$

(4)

QEMA A

$$VC = w \cdot L + c \cdot Q, \quad c = 2$$

L	Q	AP	MP	VC	AVC	MC
A: 20	100	5	-	400	4	-
B: 30	150	5	5	600	4	4
C: 40	170	4,25	2	740	4,4	7
D: 50	180	3,6	1	860	4,8	12

Δ_1 B: Enunciado AP para 16x100 AP = MP

$$b) \frac{Q_B}{L_B} = \frac{Q_B - Q_A}{L_B - L_A} \quad e) \frac{Q_B}{30} = \frac{Q_B - 100}{30 - 20} \quad c)$$

$$e) 30Q_B - 3000 = 10Q_B \quad e) 20Q_B = 3000 \quad e) Q_B = 150$$

$$c) VC = w \cdot L + c \cdot Q$$

$$A: 400 = 20w + 2 \cdot 100 \quad e) 20w = 200 \quad e) \underline{w = 10}$$

$$\Delta_2 \Delta C = C_{175} - C_{100} = 2 \cdot 175 = 2 \cdot 100 = 350 - 200 = \underline{150}$$

$$D: MP = \frac{\Delta Q}{\Delta L} \quad e) \downarrow = \frac{180 - 175}{50 - x} \quad e) x = 45$$

$$\Delta w = w \cdot 45 - w \cdot 20 = 450 - 200 = \underline{250}$$

5

- Δ3 α) - βραχυχρόνια περίοδος
 - ΗΡ αρχικά αυξάνει και στη συνέχεια μειώνεται το κόστος.
 β) - Μεταβολή αμορφών ανεξάρτητα σε σταθερό και μεταβλητό συντελεστή

Δ4 α)

P (μC)	Qs ατομ.	Qs _{αγ} = 200 Qs
4	150	30000
7	170	34000
12	180	36000

β) $Q_0 = 60000 - 2000P$

P	Qs	Q ₀
4	30000	52000
7	34000	46000
12	36000	36000

Γικ P=4: Q₀ = 52000
 Γικ P=7: Q₀ = 46000
 Γικ P=12: Q₀ = 36000

Επειδή για P=12
 ισχύει Q₀ = Q_s
 P₀ = 12
 Q₀ = 36000