14.1

$D(P) = 100 - P$ $\quad P$ = prezzo dell'ambrosia

a) Se $P = 50$ $\quad D = ?$

$D(P) = 100 - 50 = 50$

b) SURPLUS LORDO ?

$\text{AREA} = \text{BASE} \times (h_1 + h_2) \cdot \frac{1}{2}$

Se $P = 100$ $\quad D = 50$

Se $D = 0$ $\quad P = 100$

$h_1 = 100$, $h_2 = 50$, $\text{BASE} = 50$

$S.L = 50 \times (150) \cdot \frac{1}{2} = 3750$

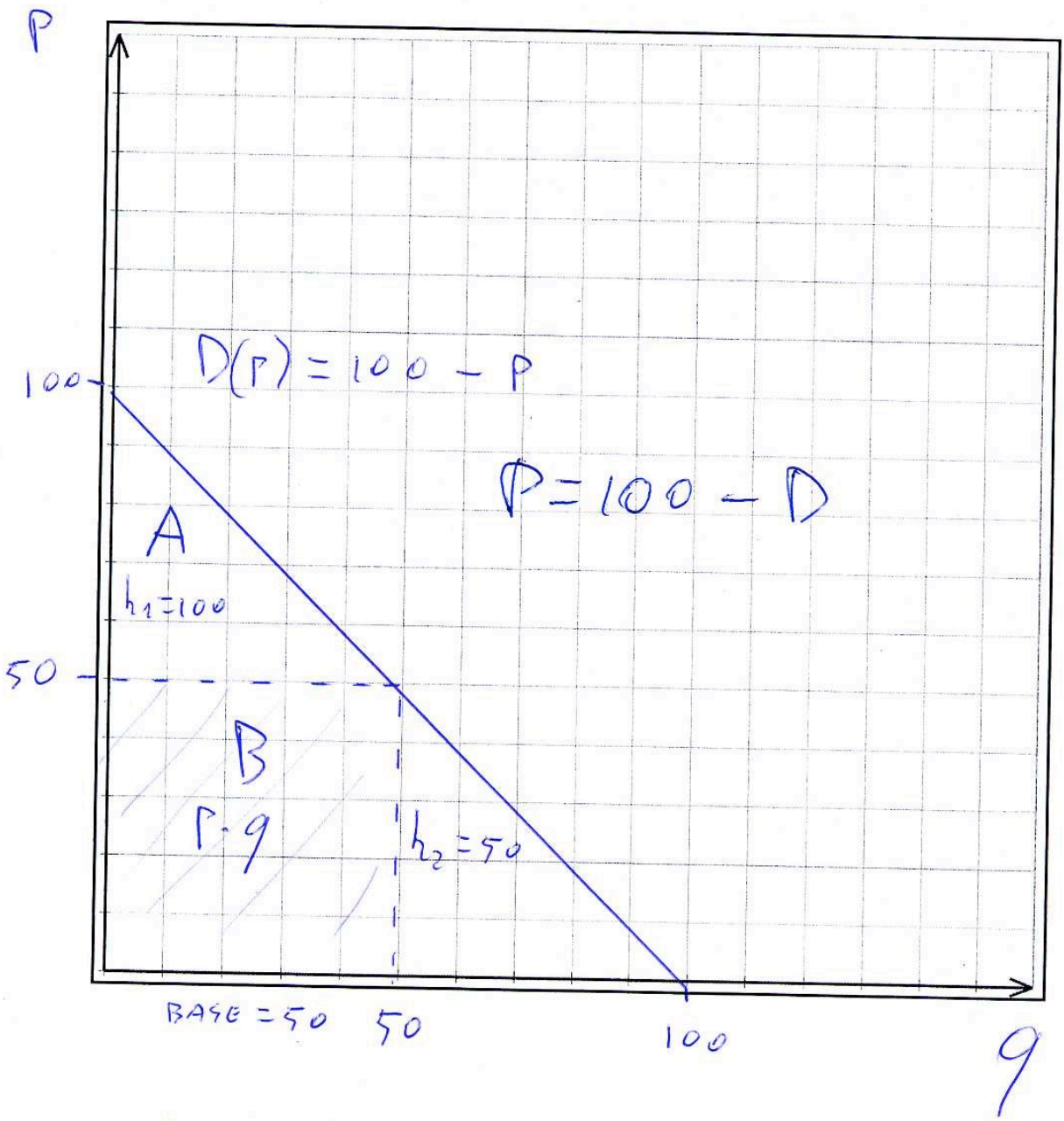
c) Spesa per l'ambrosia ?

$P \cdot q = 50 \cdot 50 = 2500$

d) SURPLUS NETTO ?

$SL - P \cdot q = 3750 - 2500 = 1250$

(14.1)



A + B = SURPLUS LORDO = 3750.

B = SPESA = 2500

A = SURPLUS NETTO = 1250

(14.3) x = Tapi zoecchi

$$U(x,y) = 100x - \frac{x^2}{2} + y$$

$$P_x x + y = m \qquad (P_2 = 1)$$

a) utilità quasi lineal

b) domanda de Tapi inversa?

$$|MRS| = \frac{P_1}{P_2} = P_1$$

$$|MRS| = \frac{MV_x}{MV_y} = 100 - 2\frac{x}{2} = 100 - x$$

$100 - x = P_1$

$P_x = 100 - x$ → $x = 100 - P_x$

c) Se $P_x = 50 \rightarrow x = 100 - 50 = 50$

d) Se $P_x = 80 \rightarrow x = 100 - 80 = 20$

e) Se $m = 4000$ e $P_x = 50$, $U = ?$

$x = 50$

$$U = 100 \cdot 50 - \frac{50^2}{2} + 4500 = 4250$$

→

SEGUE

f) $V = ?$ con $P_x = 80$

$$V = 100 \cdot 20 - \frac{20^2}{2} + (4000 - 80 \cdot 20) =$$

$$V = 2000 - 200 + 2400 = 4200$$

g) ΔV per $\Delta P = (80 - 50) = 30$

$$\Delta V = 4250 - 4200 = 50$$

h) Δ SURPLUS NETTO ?

$\rightarrow$ $\Delta S_M = V - P \cdot q$

SURPLUS netto con $P_x = 50$

$4250 - 2500 = 1750$

S. N con $P_x = 80$

$4200 - 2600 = 1600$

Δ S. N $= 1750 - 1600 = 150$

CON UTILITÀ QUASI LINEARE IL SURPLUS LORDO MISURA L'UTILITÀ DAL CONSUMO DI UN BENE

UTILITÀ TOTALE $V(x) + m$

14 p 5

$U(x,y) = \min\{x, y\}$

x = orecchini

y = bracciali

$(P_x, P_y) = (2, 1)$ $m = 12$

---

a) Dx = ?

→ perfetti complementi

$2x + y = m$

$x = y$ $\quad 2x + x = m$

$x = \frac{m}{3} = \frac{12}{3} = 4$

$y = 12 - 2 \cdot 4 = 12 - 8 = 4$

V.B → $y = m - 2x = 12 - 2x$

---

b) $P_x = 3$, $P_y = 1$, $m = 12$

V.B → $y = 12 - 3x$

$x = \frac{m}{P_x + P_y} = \frac{12}{3 + 1} = \frac{12}{4} = 3$

$y = 12 - 3 \cdot 3 = 12 - 9 = 3$

c) Se $(P_x, P_y) = (2, 1)$ invariati. 14.5 (2)

quale $m \rightarrow V = 3$?

$$x = \frac{m}{P_1 + P_2} = 3$$

$$m = 3(2+1) = 3 \cdot 3 = 9$$

VB $\rightarrow$ $y = 9 - 2x$

- VARIAZIONE EQUIVALENTE: $12 - 9 = 3$

d) Se $(P_x, P_y) = (3, 1)$ [meno pezzi]

quale paniere per avere $V = 4$ (come prima)?

$(x, y) = (4, 4)$

$$\frac{m}{P_1 + P_2} = 4 \rightarrow \frac{m}{4} = 4 \rightarrow m = 16$$

Δ COMPENSATIVA $= m' - m = 16 - 12 = 4$

14.6

x = VIDEOGIOCHI

y = SALSICCE [DOLLARI SPESI]

P_x , m $\quad P_x x + y = m$

$U(x,y) = \ln(x+1) + y$

---

a) $|MRS| = \frac{P_x}{P_y} = P_x$

$MU_x = \frac{1}{x+1}$, $MU_y = 1$

$$\frac{1}{x+1} = P_x$$

b)
$$\begin{cases} 1 = P_x(x+1) \\ x+1 = \frac{1}{P_x} \\ x = \frac{1}{P_x} - 1 \end{cases}$$

$$y = m - P_x \cdot \left(\frac{1}{P_x} - 1\right) = m - 1 + P$$

c) $P_x = 0{,}25 \quad m = 10 \quad x = ? \quad y = ? \quad U(x,y) = ?$

$$x = \frac{1}{0{,}25} - 1 = 4 - 1 = 3$$

$U(x,y) = \ln(3+1) + 9{,}25$

$y = 10 - 1 + 0{,}25 = 9{,}25\$$

$U(x,y) = 10{,}64$

d) Se $x = 0$ ~~Δ~~ m per $U = 10,64$?

Per avere $U = 10,64$ comperando solo salvicce il reddito deve essere $m = 10,64$

e) $T = 0,25$ sui videogiochi pagata dai consumatori

$P_D = P_x + 0,25$ $\quad P_x = 0,25$

$x = ?$ $\quad y = ?$ $\quad U = ?$

$$x = \frac{1}{P_{x+0,25}} - 1 = \frac{1}{0,5} - 1 = 2 - 1 = 1$$

$$y = 10 - 1 + P_D = 10 - 1 + 0,5 = 9,5$$

$$U = \ln(1+1) + 9,5 = 10,19$$

f) Se $x = 0$ m per $U = 10,19$?

Per avere $U = 10,19$ con solo salvicce $m = 10,19$

g) ~~Δ~~ SURPLUS DEL CONSUMATORE ?

$$\Delta SC = 10,19 - 10,64 = U_2 - U_1 = -0,45$$

14,8

$P(b) = 30 - 2b$

b = BISTECCHE DI BRONTOSAURO

$b = 10 \qquad P = 10$

a) ~~[illegible]~~

SURPLUS LORDO = denaro che si prenderebbe per non rinunciare al consumo

$$SL = \text{base} \cdot (h_1 + h_2) \cdot \frac{1}{2} = 10(30+10) \cdot \frac{1}{2} = 200\,\$$$

SURPLUS NETTO $= SL - P \cdot b = 200 - 10 \cdot 10 = 100$

b) $\Delta P = 4 \rightarrow P = 14$ $\qquad \Delta$ SURPLUS ?

$2b = 30 - P$

$$b = 15 - \frac{1}{2}P = 8 \qquad \left[15 - \frac{1}{2} \cdot 7\right]$$

$$SL = 8 \cdot (30 + 14) \cdot \frac{1}{2} = 176$$

~~[illegible]~~

~~[illegible]~~

Δ SURPLUS NETTO $= (10+8) \cdot \frac{4}{2} = -36$

15.0

CALCOLARE L'ELASTICITÀ $\frac{P}{q} \cdot \frac{\Delta q}{\Delta P}$

a) $D(P) = 60 - P$ $\quad \frac{\Delta q}{\Delta P} = -1$; $q = 60 - P$

$$\varepsilon = -\frac{P}{60 - P}$$

b) $D(P) = a - bP$ $\quad \frac{\Delta q}{\Delta P} = -b$

$$\varepsilon = -\frac{bP}{a - bP}$$

c) $D(P) = 40P^{-2}$ $\quad \frac{\Delta q}{\Delta P} = -2 \cdot 40P^{-3}$

$$\varepsilon = -\frac{P}{40P^{-2}} 80P^{-3} = -2$$

ε costante!

d) $D(P) = AP^{-b}$ $\quad \frac{\Delta q}{\Delta P} = -bAP^{-(b+1)}$

$$\varepsilon = -\frac{P}{AP^{-b}} bAP^{-(b+1)} = -bPP^{-(b+1)} P^{b} = -bP^{0} = -b$$

→

e) $D(P) = (P+3)^{-2}$ $\quad \frac{\Delta P}{\Delta q} = -2(P+3)^{-3} \cdot 1$

$$\varepsilon = -\frac{P}{(P+3)^{-2}} \cdot 2(P+3)^{-3} = -2P(P+3)^{-1} = \boxed{-\frac{2P}{P+3}}$$

ж) $D(P) = (P+a)^{-b}$ $\quad \frac{\Delta P}{\Delta q} = -b(P+a)^{-(b+1)}$

$$\varepsilon = -\frac{bP}{(P+a)^{-b}}(P+a)^{-(b+1)} = -bP \cdot (P+a)^{-1} = \boxed{-\frac{bP}{P+a}}$$

15.1 BUICK DODGE domanda di benzina

$$\begin{cases} D_B = 20 - 5P & P \le 4 \\ D_B = 0 & P > 4 \end{cases}$$

$$\begin{cases} D_D = 15 - 3P & P \le 5 \\ D_D = 0 & P > 5 \end{cases}$$

150 CONSUMATORI : 100 BUICK , 50 DODGE

---

a) $\begin{cases} P_{benzina} = 3 \quad \text{domanda individuale?} \\ D_B = 20 - 5 \cdot 3 = 20 - 15 = 5 \\ D_D = 15 - 3 \cdot 3 = 15 - 9 = 6 \end{cases}$

b) $\begin{cases} D_{TOT_B} = 5 \times 100 = 500 \\ D_D^{TOT} = 6 \cdot 50 = 300 \end{cases}$

c) DOMANDA TOTALE per $P = 3$

$$D = 500 + 300 = 800$$

d) disegnare le curve di domanda →

f) Se $P = 1$ e $\Delta P = 0{,}10$ $\quad \frac{\Delta P}{P} = 10\%$

ΔD? $\rightarrow$

$P' = 1{,}1$

per $P = 1$

$D = D_B + D_D = (20 - 5) \cdot 100 + (15 - 3)50 = 2100$

per $P' = 1{,}1$ $\quad D = (20 - 5 \cdot 1{,}1) \cdot 100 + (15 - 3 \cdot 1{,}1)50 = 2035$

$\Delta D = 2035 - 2100 = -65$

$\frac{\Delta D}{D} = -3\%$

g) $P = 4{,}50$ $\quad \Delta P = 0{,}1$ $\quad \Delta D = ?$

$D(P = 4{,}5) = \underbrace{(20 - 5 \cdot 4{,}5)}_{0} 100 + (15 - 3 \cdot 4{,}5)50 = 75$

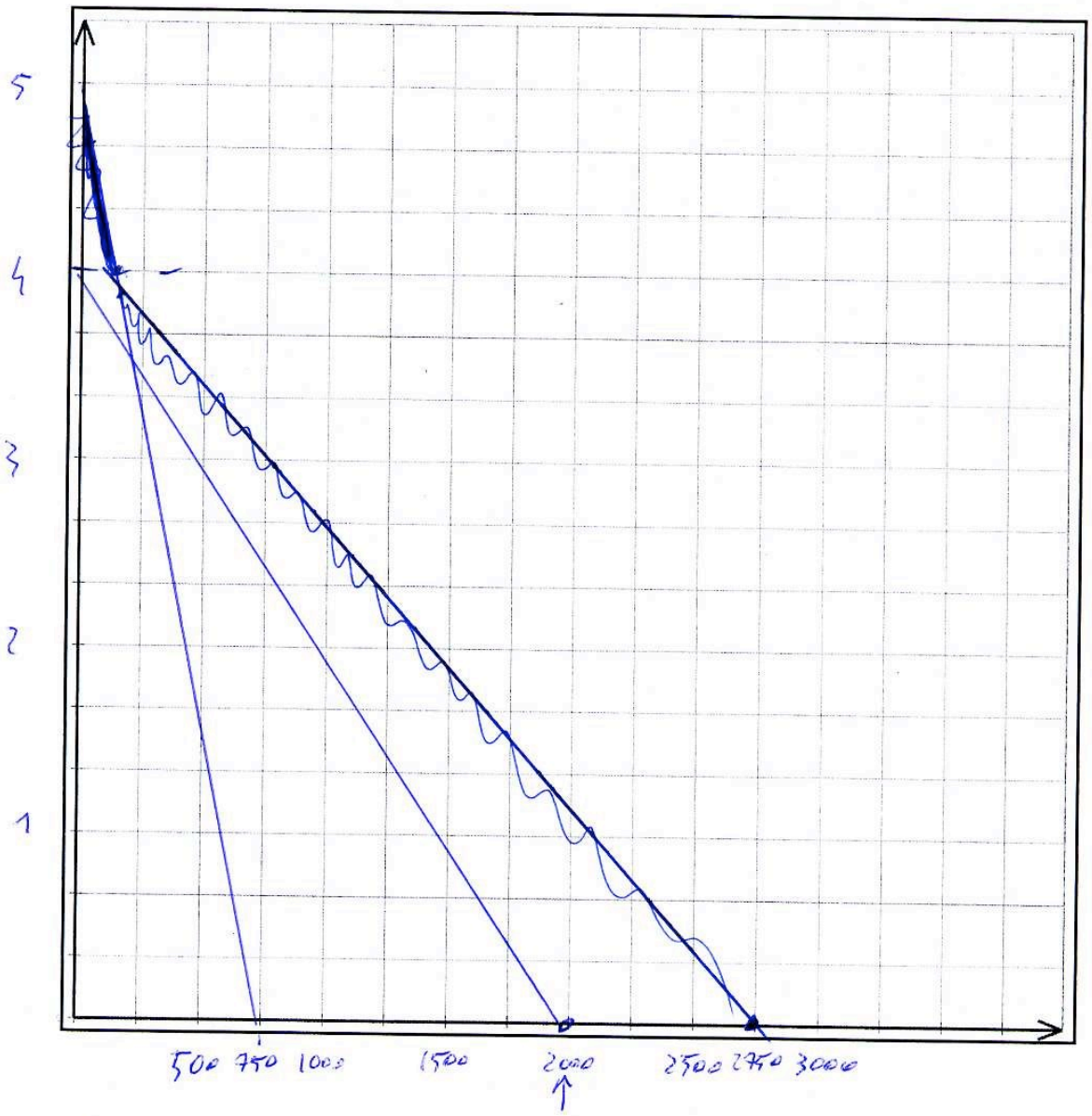
$D(P = 4{,}6) = 0 + (15 - 3 \cdot 4{,}6)50 = 60$

$\Delta D = 60 - 75 = -15$

$\frac{\Delta D}{D} = -\frac{15}{75} = 20\%$!

h) $\Delta D = 0$!

15.1



$P \leq 4 \begin{cases} D_B = 20 - 5P \\ P = 4 - \frac{1}{5}P \end{cases}$ | 100 CONSUMATORI $\begin{cases} P=0 \quad D_1 = 20 \\ 100 \cdot D_1 = 2000 \end{cases}$

$P \leq 5 \begin{cases} D_D = 15 - 3P \\ P = 5 - \frac{1}{3}D_D \end{cases}$ | 50 CONSUMATORI $\begin{cases} P=0 \quad D_D = 15 \\ 50 \cdot D_D = 15 \cdot 50 = 750 \end{cases}$

$$D_{TOT}(P=0) = 2000 + 750 = 2750$$

15.5 $q(p) = (p+1)^{-2}$

a) $\varepsilon = ?$ $\quad \frac{dq}{dp} = -2(p+1)^{-3}$

$$\varepsilon = -\frac{2p}{(p+1)^{-2}}(p+1)^{-3} = -\frac{2p}{p+1}$$

b) Per quale p $\varepsilon = -1$?

$$+1 = +\frac{2p}{p+1}$$

$$2p = p+1$$

$$2p - p = 1 \rightarrow \boxed{p = 1}$$

c) $R(p) = q(p) \cdot p = (p+1)^{-2} \cdot p$

max R $\rightarrow p = ?$

$$\frac{dR}{dp} = -2(p+1)^{-3} \cdot p + (p+1)^{-2} = 0$$

$$(p+1)^{-2} = 2p(p+1)^{-3}$$

$$1 = 2p(p+1)^{-1} = \frac{2p}{p+1}$$

$p+1 = 2p$

$\boxed{p = 1} \rightarrow \max R$!

Per $p = 1$ $\varepsilon = -1$ e max R !

→

15.5 (2)

d) $q = (p+a)^{-b}$ $\quad a > 0 \quad b > 1$

$$\varepsilon = \frac{p}{(p+a)^{-b}} \cdot (-b(p+a)^{-(b+1)}) = -\frac{pb}{p+a}$$

$$\varepsilon = -1 = -\frac{pb}{p+a}$$

$$p+a = pb$$

$$p(b-1) = a$$

$$p = \frac{a}{b-1} \rightarrow \boxed{\varepsilon = -1}$$

$$p = -\frac{a}{1-b}$$

15.7 | $Y_2 - Y_0$

$$D(P, M) = 4 - 2P + \frac{1}{100} M$$

$M = 100 \quad P = 1$

a) Elasticità rispetto il reddito?

$$\frac{\frac{\Delta D}{D}}{\frac{\Delta m}{m}} = \frac{m}{D} \frac{\Delta D}{\Delta m}$$

$$D = 4 - 2 + \frac{1}{100} \cdot 100 = 3$$

$$\frac{\Delta D}{\Delta m} = \frac{1}{100}$$

Elasticità rispetto il reddito:

$$\rightarrow \left| \frac{100}{3} \cdot \frac{1}{100} = \frac{1}{3} \right.$$

b) $\varepsilon = ? \quad \frac{P}{q} \frac{\Delta q}{\Delta P} = \frac{1}{3} \cdot -2 = -\frac{2}{3}$

15.8

$$P = 10 - Q$$

a) per quale P max R ?

$$R = P \cdot Q = (10 - Q)Q = 10Q - Q^2$$

$$MR = \frac{dR}{dQ} = 10 - 2Q = 0$$

$$2Q = 10$$

$$Q = 5$$

$$\boxed{P = 10 - 5 = 5}$$

b) Q per $P = 5$?

$$\boxed{Q = 10 - P = 10 - 5 = 5}$$

15.9 domanda di biglietti di Yankee

$$D(P) = 200.000 - 10.000P$$

CAPIENZA STADIO = 10.000 persone

a) $P(q) = ?$ domanda inversa?

$$10.000P = 200.000 - D$$

$$\boxed{P = 20 - \frac{1}{10.000} D}$$

b) ~~$R = ?$~~ $R(D) = ?$ [in funzione della domanda]

$$R = P \cdot D = \left(20 - \frac{1}{10.000} D\right) D$$

$$\boxed{R(D) = 20D - \frac{1}{10.000} D^2}$$

$$\boxed{MR = \frac{dR}{dD} = 20 - \frac{2}{10.000} D}$$

c) → fare i grafici

d) a quale P max R? Quanti biglietti?

$$R(P) = (200.000 - 10.000P)P = 200.000P - 20.000P^2$$

$$\frac{dR}{dP} = 200.000 - 40.000P = 0$$

$$\boxed{P = \frac{40.000}{200.000} = \frac{4}{20} = \frac{1}{5} = 0,20\ \$}$$

$D = 200.000 - 10.000 \cdot 0,20 = 198.000 > 10.000!$ →

e) per $D = 198.000$

$$MR = 20 - \frac{2}{10.000} \cdot 198.000 = -19,60$$

$$\varepsilon = ? = \frac{-0,2}{198.000} \cdot 10000 = -0,01$$

✗) $D = 300.000 - 10.000P$

$$P = 30 - \frac{1}{10.000} D$$

16. 1

mercato ~~degli YAK~~ del latte di YAK

$$D = 120 - 4P_d$$

$$S = 2P_s - 30$$

a) Grafico

$P_d = 0 \rightarrow D = 120$

$S = -30$

$$\begin{cases} P_d = 30 - \frac{1}{4} D \\ P_s = 15 + \frac{1}{2} S \end{cases}$$

$q = 0 \qquad P_d = 30$

$P_s = 15$

b) $D(P^*) = S(P^*)$

$120 - 4P = 2P - 30$

c) $150 = 6P \rightarrow \boxed{P^* = \frac{150}{6} = 25}$

$\boxed{D = 120 - 4 \cdot 25 = 120 - 100 = 20}$

d) offerta si riduce

$S' = 2P_S - 60$ [disegno S']

$P^* = ?$ $D = ?$

$120 - 4P = 2P - 60$

$180 = 6P$

$P^* = 30$

$D = 120 - 4 \cdot 30 = 120 - 120 = 0$

f) sussidio di produttori $T = 5$

$P_S = P_d + T = P_d + 5$

$S = 2(P_d + 5) - 60$

g) $120 - 4P_d = 2P_S - 60 = 2(P_d + 5) - 60$

$120 - 4P_d = 2P_d + 10 - 60$

$120 + 60 - 10 = 6P_d$

$P_d = \frac{170}{6} = 28,33$

$P_S = 28,33 + 5 = 33,33$

$S = 2 \cdot 33,33 - 60 = 66,66 - 60 = 6,66$

h) EFFETTO AI CONSUMATORI $T=5$

$$P_D = P_S - T = P_S - 5$$

$$120 - 4(P_S - 5) = 2P_S - 60$$

$$120 - 4P_S + 20 = 2P_S - 60$$

$$120 + 20 + 60 = 6P_S$$

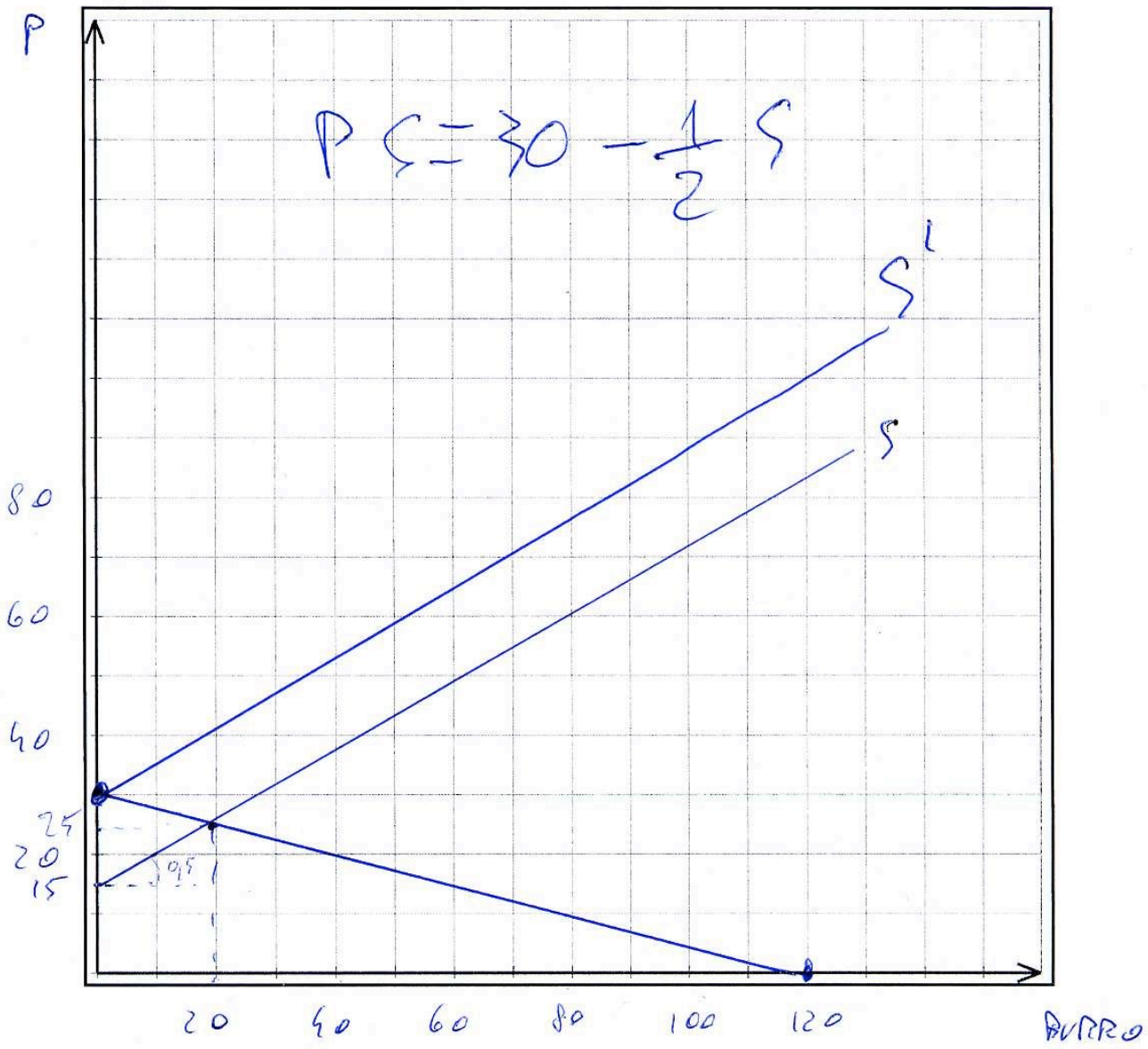
$$200 = 6P_S \qquad P_S = \frac{200}{6}$$

$$\boxed{P_S = 33,33}$$

$$\boxed{P_D = 33,33 - 5 = 28,33}$$

$$\boxed{D = 120 - 4 \cdot 28,33 = 6,6}$$

16.1



$$\begin{cases} P_S = 15 + \frac{1}{2} S \rightarrow P = 0 \rightarrow S = -30 \\ P_D = 30 - \frac{1}{4} D \rightarrow P = 0 \rightarrow D = 120 \end{cases}$$

16.2

$$\begin{cases} D(P) = 40 - P \\ S(P) = 10 + P \end{cases}$$

$$\begin{cases} P = 40 - D \\ P = S - 10 \end{cases}$$

→ DISEGNARE

a) $P^* = ?$ $D = S$?

$40 - P = 10 + P$

$30 = 2P$

$\boxed{P = 15}$

$\boxed{D = S = 40 - 15 = 25}$

b) MAX $S = 20$ → $P_D = ?$ $S(P_D) = ?$

$20 = 40 - P_D$

$\boxed{P_D = 20}$

$\boxed{S(P=20) = 10 + 20 = 30}$

$\boxed{P_S(20) = 20 - 10 = 10}$

c) PREZZO DI MERCATO TAGLIANDI ?

$P_D - P_S = T = 30 - 10 = 10$

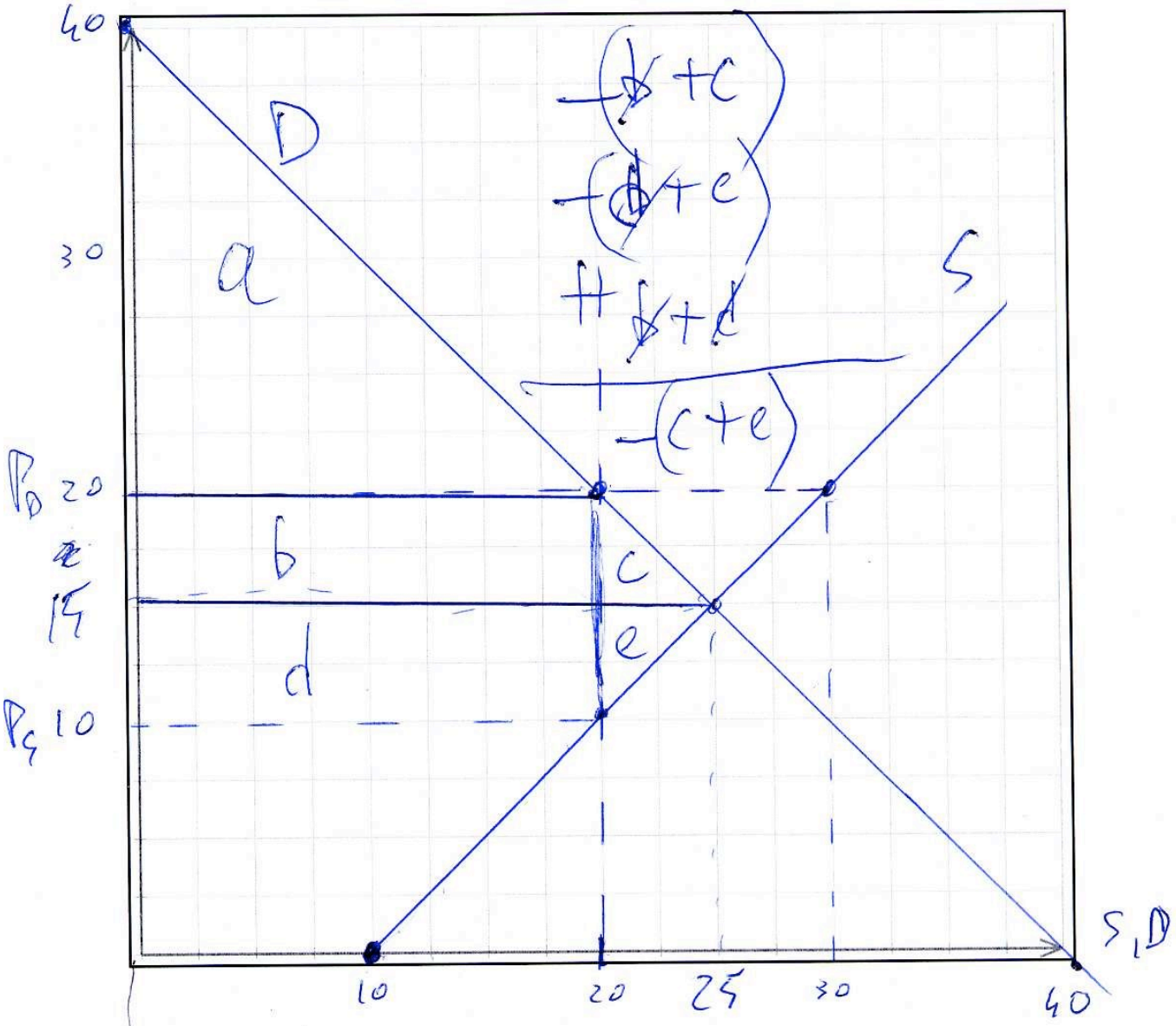
16.2 (2)

d) Perdita netta causata dalla tassazione a carico delle vendite?

$$\frac{(q^* - 20) \cdot (P_D - P_S)}{2}$$

$$\frac{(25 - 20) \cdot 10}{2} = \frac{5 \cdot 10}{2} = \boxed{25} \leftarrow$$

16.2



$$\begin{cases} P = 40 - D \\ P = S - 10 \end{cases}$$

$P = 0 \rightarrow D = 40$

$P = 0 \rightarrow S = 10$

16.3 lezioni di xci

$$\begin{cases} D(P_D) = 100 - 2P_D \\ S(P_S) = 3P_S \end{cases}$$

a) $P^* = ?$ $q^* = ?$

$100 - 2P = 3P$

$100 = 5P$

$\boxed{P^* = 20}$

$\boxed{D^* = S^* = 100 - 2 \cdot 20 = 100 - 40 = 60}$

b) e c) $T = 10$ → Tassa sulla lezione a carico dei consumatori

$\boxed{P_D = ? \quad S = ?}$

$P_D = P_S + T = P_S + 10$

$100 - 2(P_S + 10) = 3P_S$

$100 - 2P_S - 20 = 3P_S$

$80 = 5P_S$

$\boxed{P_S = 16}$ $\boxed{P_D = 16 + 10 = 26}$

$S = 3 \cdot 16 = 48$

16.3 (2)

d) $\begin{cases} T = 10 & \text{nel comune} \\ T_S = 6 & \text{al maestro} \end{cases}$

$$\begin{cases} P_D = P + T = P + 10 \\ P_S = P + T_S = P + 6 \end{cases}$$

$$100 - 2(P+10) = 3(P+6)$$

$$100 - 2P - 20 = 3P + 18$$

$$80 - 18 = 5P$$

$$5P = 62$$

$$P = \frac{62}{5} = 12,40$$

$P_S = 12,4 + 6 = 18,4$

$P_D = 12,4 + 10 = 22,4$

~~$P_D = 3 \cdot 12,40 =$~~

$$S = 3(12,40 + 6) = 55,2 \simeq 55$$

Se $T = 4$

$$100 - 2(P_S + 4) = 3P_S$$

$$100 - 2P_S - 8 = 3P_S$$

$$92 = 5P_S$$

$$P_S = \frac{92}{5} = 18,40$$

$$S = 3 \cdot 18,4 = 55,2 \simeq 55$$

EFFETTI UGUALI !

16.4 Merluzzo salato

$$\begin{cases} D(P) = 200 - 5P \\ S(P) = 5P \end{cases}$$

a) $P^* = ?$ $q^* = ?$ DISEGNARE LE CURVE

$$200 - 5P = 5P$$

$$200 = 10P$$

$$\begin{cases} P^* = \frac{200}{10} = 20 \\ q^* = 5 \cdot 20 = 100 \end{cases}$$

b) TASSA $T = 2$ → curva di offerta? , $P^* = ?$ $q^* = ?$

[PREZZO DI DOMANDA SUL GRAFICO]

$$P_D = P_S + T$$

$$P_S = P_D - 2$$

$$S(P_D) = 5 \cdot P_S = 5 \cdot (P_D - 2) = 5P_D - 10$$

$$200 - 5P_D = 5P_D - 10$$

$$210 = 10P_D$$

$$\boxed{P_D = 21} \qquad \boxed{P_S = 21 - 2 = 19}$$

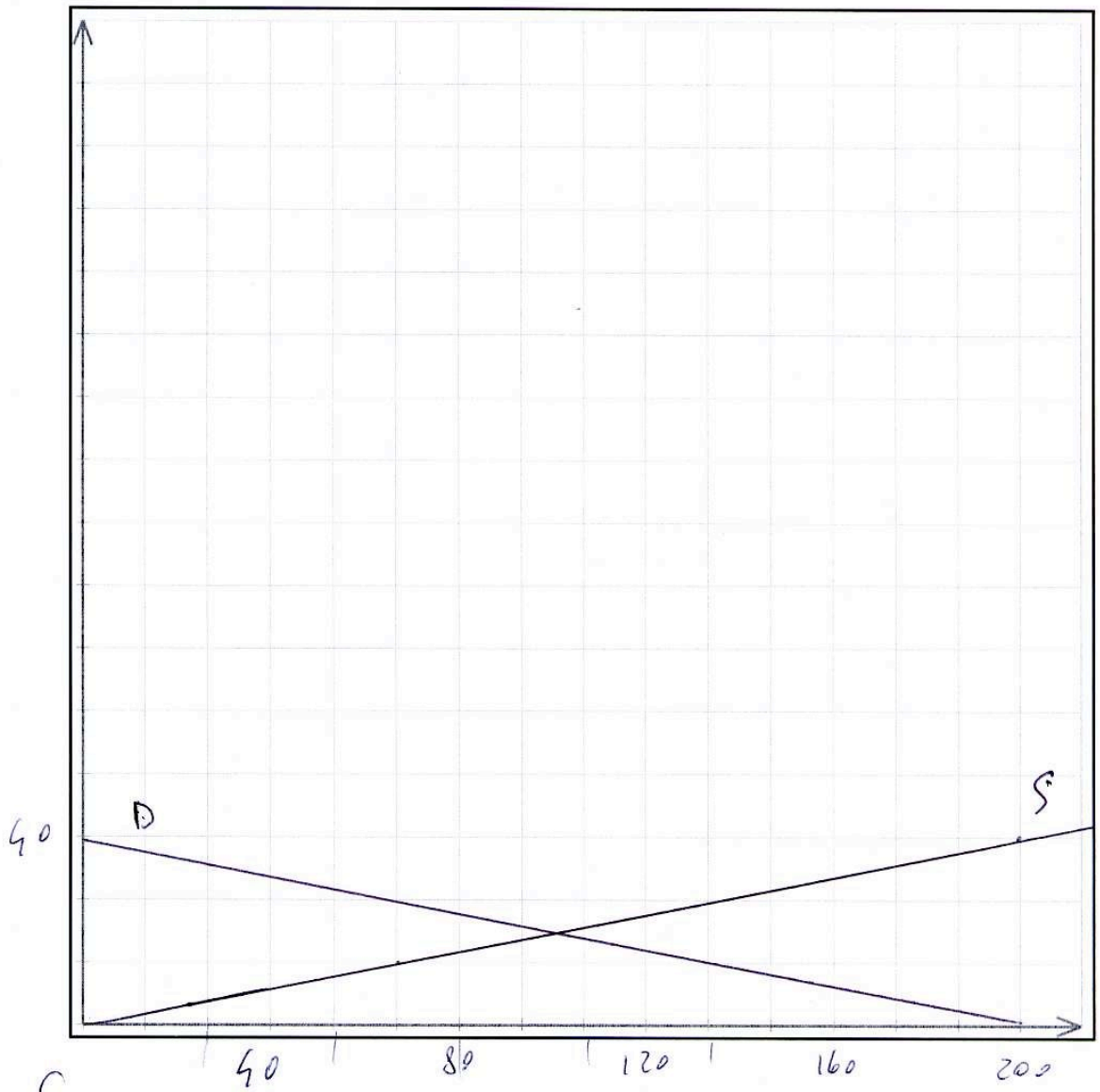
$$\boxed{q^* = 200 - 5 \cdot 21 = 95}$$

→

c) Perdita nella caduta della Terra?

$$\frac{T \cdot \Delta q}{2} = -\frac{5 \cdot 2}{2} = -5$$

16.4



$$\begin{cases} D(P) = 200 - 5P \rightarrow \begin{cases} P = 40 - \frac{1}{5} D \end{cases} \\ S(P) = 5P \rightarrow \begin{cases} P = \frac{1}{5} S \end{cases} \end{cases}$$

CON $T = 2$

$$S(P_D) = 5P_D - 10 \longrightarrow \boxed{P = 2 + \frac{1}{5} S}$$

16.7 $\varepsilon = -1 \quad P = 10 \quad D = 6000$

a) FUNZIONE DI DOMANDA?

→ elasticità costante, perciò

$$D(P) = A P^{-1}$$

$$D(P) = 6000 = \frac{A}{10}$$

$$A = 60.000$$

$$D(P) = \frac{60.000}{10}$$

b) Se $S = 5000$, $P^* = ?$

$$5000 = \frac{60.000}{P}$$

$$P^* = \frac{60.000}{5000} = 12$$

c) Se $\Delta D = 10\%$ $D = ?$ $\Delta S = 5\%$ $q = ?$

$$D = \left(60.000 + 60000 \cdot 0,1\right) P^{-1} = 66.000 P^{-1}$$

$$S' = \left(5000 + 5000 \cdot 0,05\right) = 5250$$

$$5250 = 66.000 P^{-1}$$

$$P = \frac{66.000}{5250} \approx 12,57$$

$$D = S = 5250$$

16.10 BANANE

$$\begin{cases} P_D = 18 - 3Q_d \\ P_S = 6 + Q_S \end{cases}$$

a) Se $P_D = P_S$

$$18 - 3Q = 6 + Q$$

$$12 = 4Q$$

$$\boxed{Q^* = \frac{12}{4} = 3}$$

$$\boxed{P^* = 6 + 3 = 9}$$

b) SUSSIDIO AI PRODUTTORI $s = 2$

$$P_S = P_D + 2$$

$$\begin{cases} P_S = P_D + 2 = 6 + Q_S \\ P_D = 4 + Q_S \end{cases}$$

$$18 - 3Q = 4 + Q$$

$$14 = 4Q$$

$$\boxed{Q^* = \frac{14}{4} = 3,5}$$

$$\begin{cases} P_D = 4 + 3,5 = 7,5 \\ P_S = 7,5 + 2 = 9,5 \end{cases}$$

→

c) $\Delta\%$ PREZZO = ?

$$\frac{7,5 - 9}{9} = -17\%$$

[0,1667 → 16,67%]

Elasticità incrociata

$$\frac{\frac{\Delta D_M}{D_M}}{\frac{\Delta P_B}{P_B}} = 0,05$$

$$\frac{\Delta D_M}{D_M} = 0,05 \cdot \frac{\Delta P_B}{P_B} = 0,05 \cdot 0,1667 = 0,0083$$

$$\frac{\Delta D_M}{D_M} = 0,83\%$$