

esercizio 1

$$Q^d = 1500 - 5P$$

$$Q^o = 600 + 4P$$

(a) $Q^d = Q^o$

$$1500 - 5P = 600 + 4P$$

$$-5P - 4P = 600 - 1500$$

$$-9P = -900$$

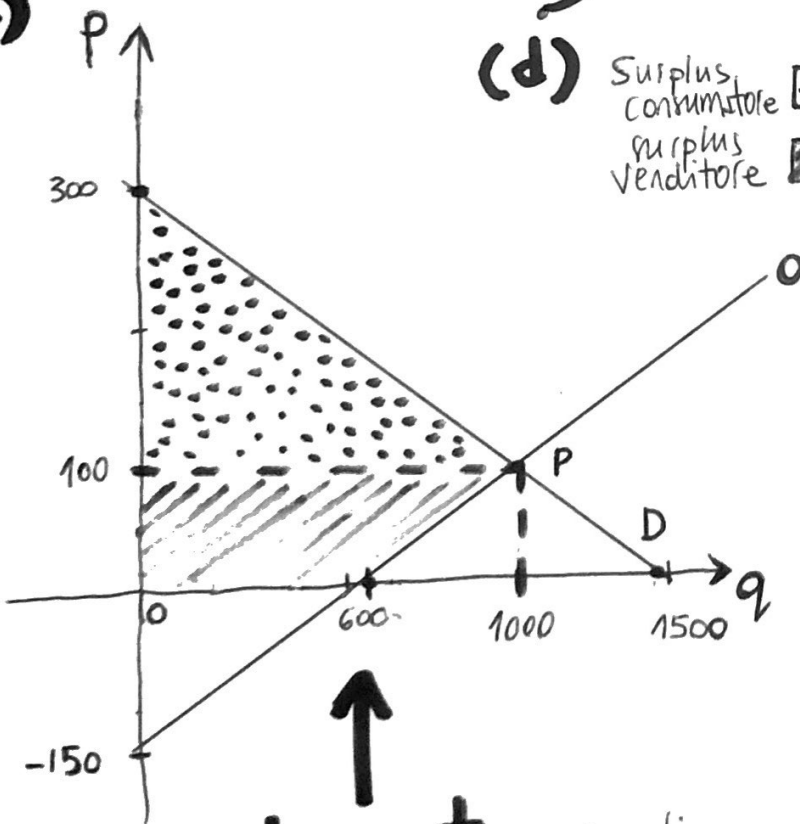
$$P^* = 100$$

$$Q^* = 1000$$

(b) $E_{D,P} = \frac{dQ^d}{dP} \cdot \frac{P}{Q} = -5 \cdot \frac{100}{1000} = -0.5$

$$E_{O,P} = \frac{dQ^o}{dP} \cdot \frac{P}{Q} = 4 \cdot \frac{100}{1000} = 0.4$$

(c)



(d) Surplus consumatore surplus venditore

$$SC = \frac{1000 \times 200}{2} = 100000$$

$$SP = \frac{(1000 + 600) \times 100}{2} = 80000$$

please note: questi sono esempi particolari (es 1 e 2) perchè in questo caso se $p=0$ ci sarebbe una quantità maggiore di zero. L'esercizio 3 è più realistico!

INTERCETTE

Domanda:

P	Q
0	1500
300	0

Offerta:

P	Q
0	600
-150	0

Esercizio 2

$$Q^d = 150 - 50p$$

$$Q^o = 60 + 40p$$

(a) $Q^d = Q^o$

$$150 - 50p = 60 + 40p$$

$$-50p - 40p = 60 - 150$$

$$-90p = -90$$

$$p^* = 1$$

$$q^* = 100$$

(b)

$$E_{D,p} = -50 \cdot \frac{1}{100} = -.5$$

$$E_{O,p} = 40 \cdot \frac{1}{100} = .4$$

(c)

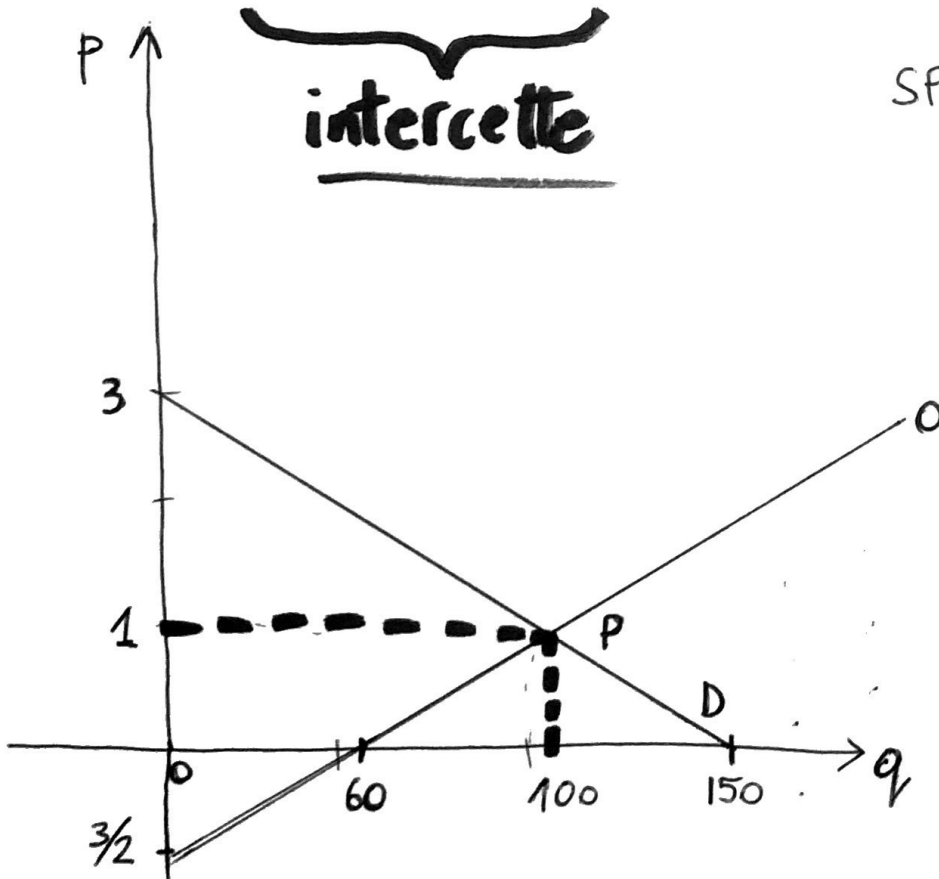
Domanda:

P	Q
0	150
3	0

Offerta:

P	Q
0	60
$-\frac{3}{2}$	0

intercette



(d) $SC = \frac{100 \times 2}{2} = 100$

$$SP = \frac{(100 + 60) \times 1}{2} = 80$$

Esercizio 3

$$Q^d = 60 - 1.5p$$

$$Q^o = -10 + p$$

(a) $Q^d = Q^o$

$$60 - 1.5p = -10 + p$$

$$-2.5p = -10 - 60$$

$$+2.5p = 70$$

$$p^* = 28$$

$$q^* = 18$$

(b)

$$E_{D,p} = -1.5 \left(\frac{28}{18} \right) = -2.3$$

$$E_{O,p} = 1 \left(\frac{28}{18} \right) = 1.5$$

(c)

Domanda:

P	Q
0	60
40	0

Offerta:

P	Q
0	-10
10	0

$$SC = \frac{18 \cdot (40 - 28)}{2} = 108$$

$$SP = \frac{18 (28 - 10)}{2} = 162$$

