

MAT 1700

LØSNINGSFORSLAG

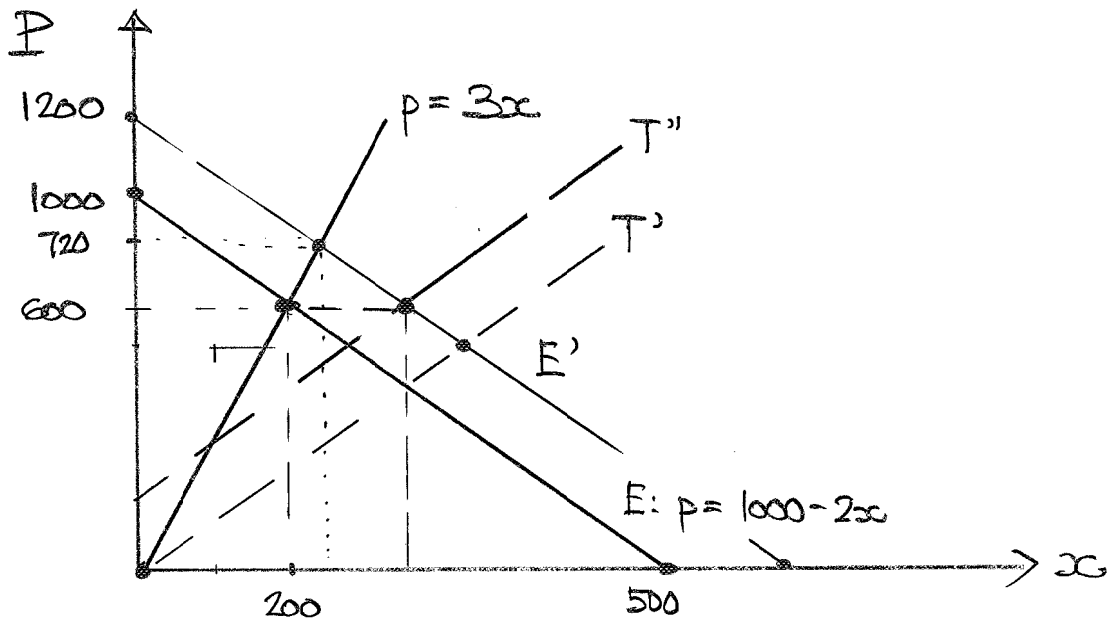
SEMINAR # 1

Løsningsforslag - Oppgavesett 1

Oppgave 1

$$(a) \quad 1000 - 2x = 3x$$

$$x = \underline{200}; \quad p = 3(200) = \underline{600}$$



$$(b) \quad E': 1200 - 2x; \quad T = 3x$$

$$x = \underline{240}; \quad p = \underline{720}$$

$$(c) \quad T': p = x; \quad E': p = 1200 - 2x$$

$$1200 - 2x = x; \quad x = \underline{400}; \quad p = \underline{400}$$

$$(d) \quad T'' \Rightarrow \text{utvikalt slutt} \equiv a$$

Oppgave 1, forts.

$$E' : p = 1200 - 2x$$

$$T'' : p = x + a$$

Gitt $p = 600$ (som i (a) ovenfor); så

$$E' : \underline{600} = 1200 - 2x \Rightarrow x = \underline{300}$$

$$E' = T''$$

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$$600 = x + a = 300 + a \Rightarrow \underline{\underline{a = 300}}$$

vertikale skiftet

Oppgave 2

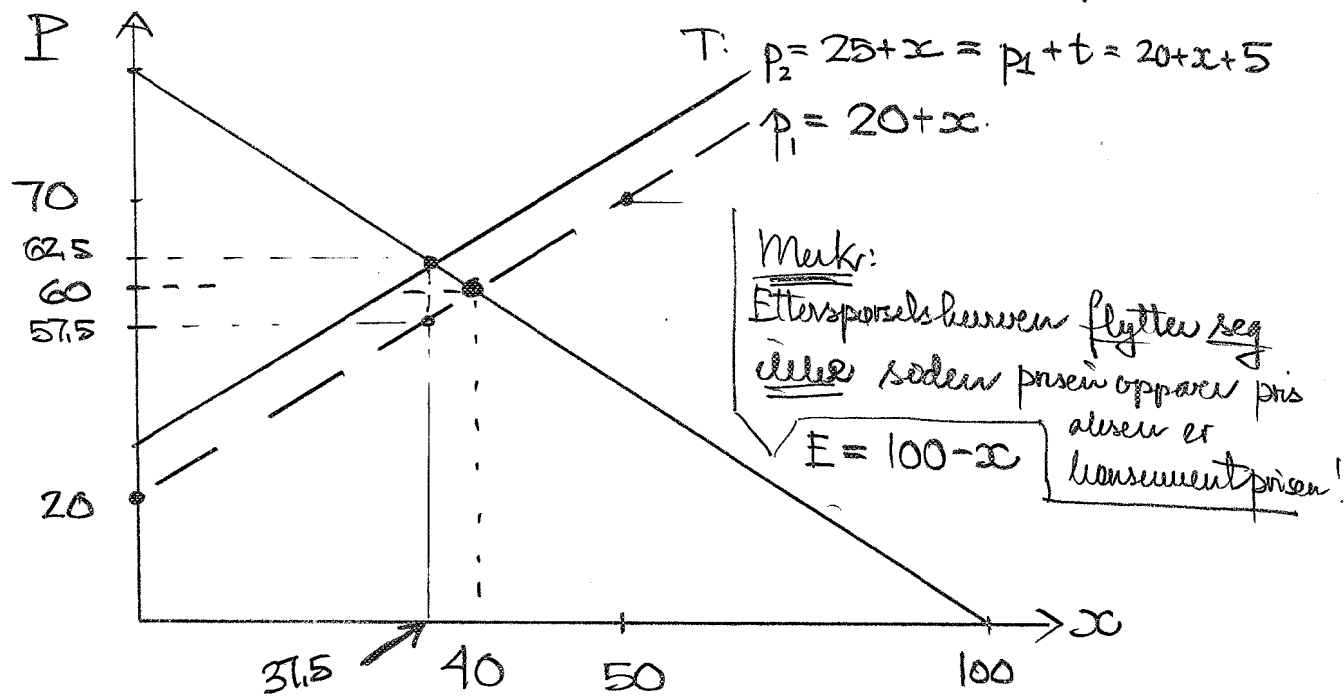
$$(a) \text{ Pris} = 4300.000 - 4000(700) = \underline{1500.000 \text{ kroner}}$$

$$(b) \text{ Pris} = 4300.000 - 4000(500) = \underline{2300.000 \text{ kroner}}$$

$$(c) \text{ Pris} = 3800.000 - 4000(500) = \underline{1800.000 \text{ kroner}}$$

Oppgave 3

For avgift: $\overset{E}{100-x} = \overset{T}{20+x}$; $\underline{x = 40}$, $\underline{p = 60}$



Etter avgift: $T': p_K = (20 + x) + 5 = 25 + x = p_T + t$

$$E: p_T = p_K - t = 62,50 - 5 = \underline{57,50}$$

$$\Rightarrow 100 - x = 25 + x; \quad \underline{x = 37,5}$$

$$p_K = (20 + 37,5) + 5 = 57,5 + 5 = \underline{62,50}$$

$$p_T = p_K - t = 62,50 - 5,0 = \underline{57,50}$$

Oppgave 3, forts

④

$$P_K = P_T + t = (20 + x) + 5 = (20 + 37.5) + 5 = \underline{\underline{62.50}}$$

$$P_T = P_K - t = 62.50 - 5 = \underline{\underline{57.50}}$$

Altså: $x \downarrow$ fra 40 til 37.5

$P_K \uparrow$ fra 60 til 62.5

$P_T \downarrow$ fra 60 til 57.5

Oppgave 4

För till: E: $p = 200 - x$; T: $p = 60 + x$

$$200 - x = 60 + x$$

$$x \Rightarrow 140 = 2x; x = \underline{\underline{70}}$$

$$p = 200 - 70 = \underline{\underline{130}}$$

Innenlandsk etterspørsel | $p^* = 100 =$ verdensmarkedsprisen

$$\Rightarrow 100 = 200 - x \Rightarrow x = \underline{\underline{100}} \text{ innenl. etterspørsel}$$

Innenlandsk tilbud | $p^* = 100$;

$$100 = 60 + x \Rightarrow x = \underline{\underline{40}} \text{ -- -- tilbud}$$

$$\Rightarrow \text{import} = 100 - 40 = \underline{\underline{60}}$$

Etter toll

$$E: p = 200 - x \Rightarrow 100 \times 1,10 = 200 - x$$

$$110 = 200 - x; \quad x = 90$$

$$T: p = 60 + x \Rightarrow 110 = 60 + x; \quad x = 50$$

$$\Rightarrow \text{import} = 90 - 50 = \underline{\underline{40}}$$

