Antal blad / *Number of* sheets: 13

TENTAMEN / EXAMINATION

Anvisningar: *Skriv din anonymitetskod på varje blad.*
Endast en uppgift får lösas på varje blad.
Var vänlig skriv tydligt!

Instructions: *Write your anonymous code on each sheet.*
Answer only one question on each sheet.
Please write clearly!

Vänligen texta anonymitetskoden i textboxen enligt exempel nedan!
Please write the Anonymous Code clearly in the textbox like example below!

Bokstäver/Letters:
A-B-C-D-E-F-G-H-I-J-K-L-M-N-O
P-Q-R-S-T-U-V-W-X-Y-Z-Å-Ä-Ö

Siffror/Numbers:
Ø-1-2-3-4-5-6-~~7~~-8-9

Exempel:

A	B	C	1	~~7~~	Ø	-	Ø	1	~~7~~

NEGA1Ø

Kurskod + Kurs / *Course Code + Course:*

MIKROEKONOMI

Delkurs / *Part course:*

Anonymitetskod / *Anonymous code* = *Kurskod + kodnr / course code + code number*

N	E	G	A	1	Ø	-	Ø	2	1

Tentamensdatum / *Examination date:* 19/10-16

Behandlade uppgifter / *Solved problems*

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
X	X	X	X											
16	17	18	19	20	21	22	23	24	25	26	27	28	29	30

Ifylles av lärare / *To be completed by the examiner*

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
12	3	6	4		9,5									
16	17	18	19	20	21	22	23	24	25	26	27	28	29	30

Poäng / Marks gained: 35

Betyg / Grade: VG

Max poäng / Total marks gained: 40

För Gk poäng / Marks gainedto be passed: _____

Examin. lärare / Kursansvarig signatur / Signature of the examiner

Namnförtydligande / Clarification of the signature

Cons NO: 2

Kurskod + anonymitetskod NEGA10-021

FLERVALSFRÅGOR (OBS! Endast 1 svar på varje fråga)

FRÅGA	RINGA IN RÄTT SVAR			
1	**A**	B	C	D
2	A	B	**C**	D
3	A	**B**	C	D
4	A	B	**C**	D
5	A	**B**	C	D
6	A	B	**C**	D
7	A	B	C	**D**
8	A	B	**C**	D
9	A	B	C	**D**
10	A	**B**	C	D
11	A	B	C	**D**
12	A	**B**	C	D
13	**A**	B	C	D
14	A	**B**	C	D
15	A	**B**	C	D
16	A	B	**C**	D
17	A	**B**	C	D
18	A	B	C	**D**
19	A	**B**	C	D
20	A	B	**C**	D

1 fel

9,5 poäng

Häftområde

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Löpande sidnr
Consecutive no:
2

Uppgift nr /
Question no:
1

Poäng / *Points awarded:*
12

Lärarens anteckning
Examiner's remarks:

a) $P_D = 1000 - 2Q$

$P_S = 200 + 2Q$

Equilibrium: $P_D = P_S$

$1000 - 2Q = 200 + 2Q$

$4Q = 800$

$Q = 200$

Equilibrium price:

$P = 1000 - (2 \cdot 200)$

$P = 600$ R 1

Answer: $Q = 200$, $P = 600$

b) $SMC = MC + MC_E$

$MC_E = 200$

$MC = \text{supply} = 200 + 2Q$

$SMC = 200 + 200 + 2Q$

$= 400 + 2Q$ R 1

Answer: $SMC = 400 + 2Q$

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c) Efficient quantity:

$SMC = Demand\ (P_D)$

$400 + 2Q = 1000 - 2Q$

$4Q = 600$

$Q = 150$ R

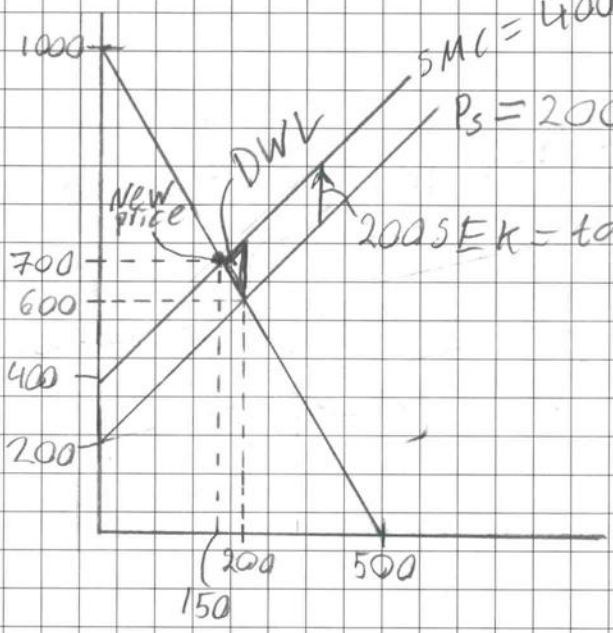


Fig 1.1

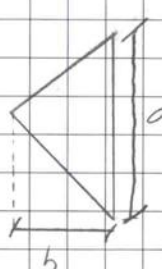
3

Answer to c): Q = 150

d) The triangle marked "DWL" is the deadweight loss due to the negative externality.

The base of the triangle (a) is $MC_E = 200$, the height (b) is equal to the change in quantity:

$200 - 150 = 50$



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d contd.) The area of the triangle: $\frac{200 \cdot 50}{2} = 5000$

Answer: DWL = 5000 for the regulated market. R

e) The optimal tax will be the same as MC_E, = 200.
The new price will be where SMC intersects D, ie Q = 150 from question C.
$P = 1000 - 2Q$ R 2
$Q = 150$
$P = 1000 - (2 \cdot 150)$
$P = 700$
Shown in Fig 1.1

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NEGA10-0021

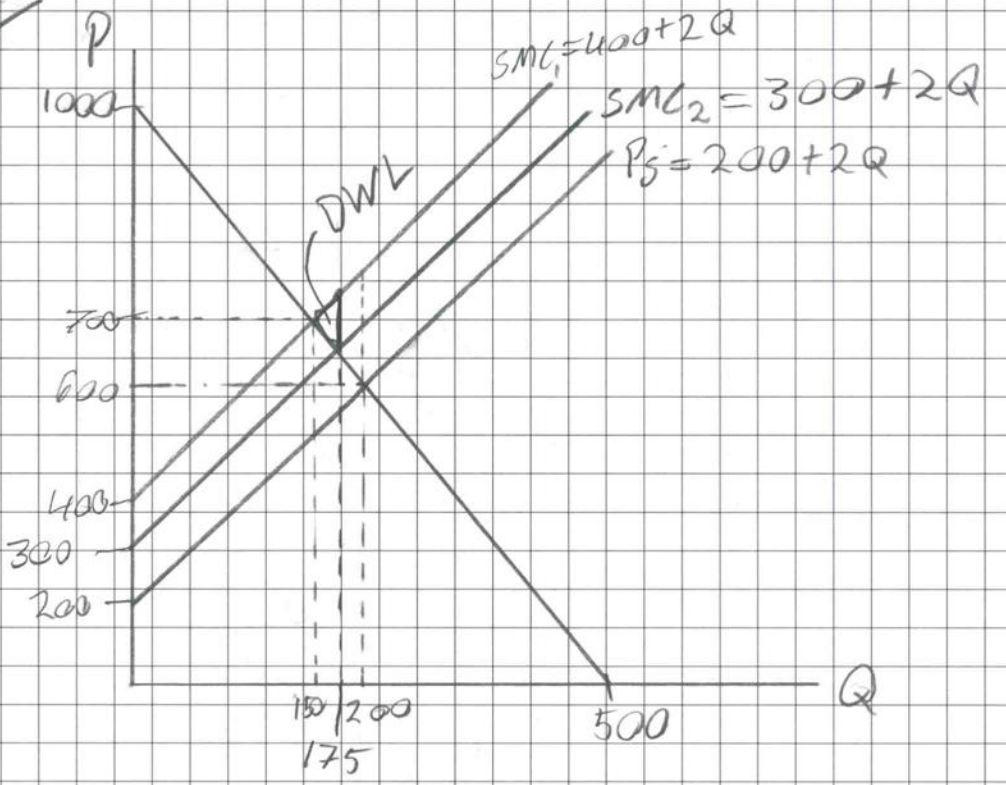
Löpande sidnr
Consecutive no:
5

Uppgift nr /
Question no:
1

Poäng / *Points awarded:*

Lärarens anteckning
Examiner's remarks:

f



$MC_E + 200 + (2 \cdot 175) = 1000 - (2 \cdot 175)$

$MC_E = 100$

The authorities estimates the negative externality to be 100 SEK.

The function will then be $SMC_2 = 300 + 2Q$.

3

The DWL is marked in the figure above as 'DWL' and has the value:

$$\frac{(200-100)\cdot(175-150)}{2} = 1250$$

R

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Löpande sidnr
Consecutive no:
6

Uppgift nr /
Question no:
1

Poäng / *Points awarded:*

Lärarens anteckning
Examiner's remarks:

f cont'd) The DWL caused by the faulty estimation is DWL = 1250.

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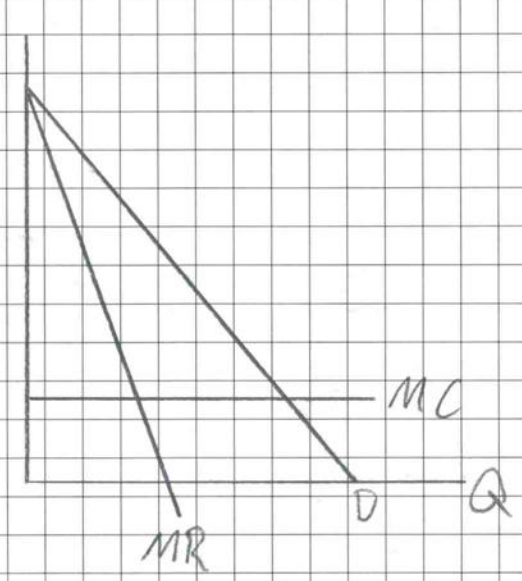
Löpande sidnr
Consecutive no:
7

Uppgift nr /
Question no:
2

Poäng / *Points awarded:*
3

Lärarens anteckning
Examiner's remarks:

a/



"No", we don't have enough information. We need the demand-function for each market to calculate the MR-function. Without that we can't check if MR_E & MR_S is where MR=MC.

0

b/ Since the English demand is more elastic they are more price sensitive. In sweden they are less sensitive. The price will therefore be higher in Sweden then in England.

1,5

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Löpande sidnr
Consecutive no:
8

Uppgift nr /
Question no:
2

Poäng / *Points awarded:*

Lärarens anteckning
Examiner's remarks:

c/ Student discounts: students get a lower price, as they have less purchasing power.

"Bundle pricing": Customers who buy larger quantities get a lower per-item-price then the custumer who buy a smaller quantity & 1

d/
- Market power
- Clearly differentiatable consumer groups. 0,5

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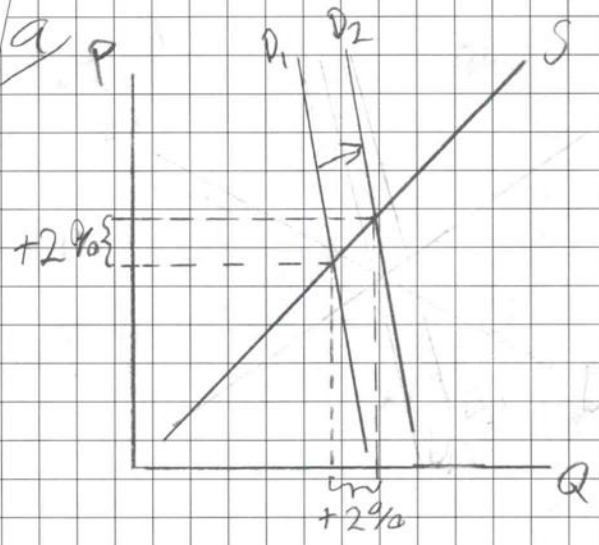
a



1,5

Goods X and Y are substitutes to eachother. R

We can calculate the price elasticity of demand (for good X) No

$$\frac{\%\text{ change in Q}}{\%\text{ change in P}} = \frac{2}{2} = 1$$

E = 1

b $MP_L = 120 - L$

$MRP = MR \cdot MP \quad MR = P = 2$

$W = 40 = MC_L$

They will use up until $MRP = W$ which gives us

$2(120 - L) = 40$

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b)

$240 - 2L = 40$

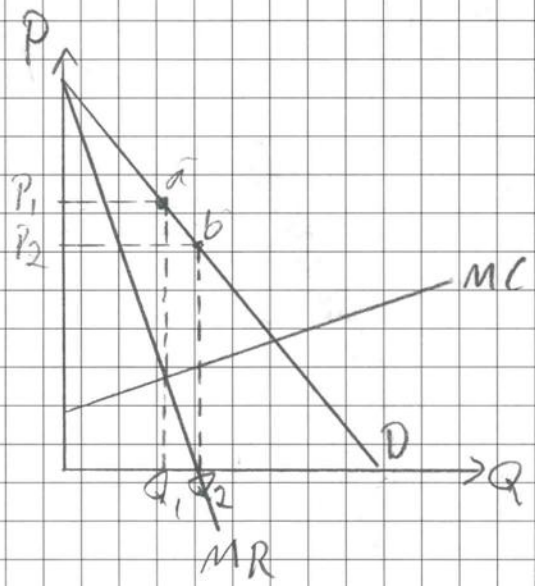
$2L = 200$

$L = 100$

R 3

Answer: They will use 100 h of labor

c)



R 2

Assuming that the owner is profit maximizing he will want to set the price where MR=MC, price is then taken from the demand curve at that quantity (point a). Since the waiter gets a percentage from the revenue she wants to set the price at the quantity wher MR=0, which is the revenue maximizing criteria, price is then taken from the demand curve (point b)

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Löpande sidnr
Consecutive no:
11

Uppgift nr /
Question no:
3

Poäng / *Points awarded:*

Lärarens anteckning
Examiner's remarks:

(cont'd) Answer:

As we can see in the figure the waitress will want a lower price (P_2) then the owner (P_1)

R

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a) a dominant strategy is the best strategy for yourself, regardless of what the competition do. R

b) Firm A has the dominant strategy 'cool' since:

1500 > -500 R
and 2000 > 1400

Firm B has no dominant strategy since:

1000 > 200 R
and 1800 > 1400

2

c) The outcome will be that Firm A will choose 'cool' and firm B will therefore also choose 'cool' since the daminant strategy for A is 'cool' and 1000 > 200 for B in that case.
Outcome Firm A: 1500
Outcome Firm B: 1000

R 1

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Löpande sidnr
Consecutive no:
13

Uppgift nr /
Question no:
4

Poäng / *Points awarded:*

Lärarens anteckning
Examiner's remarks:

d yes.
If the firms cooperate it would be, since they can reach a higher total outcome if they do:

(1400 + 1800) > 1500 + 1000

not relevant with total

But if they dont cooperate the dominant strategy will always be 'cool' for firm A.

0

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