4. June 2008

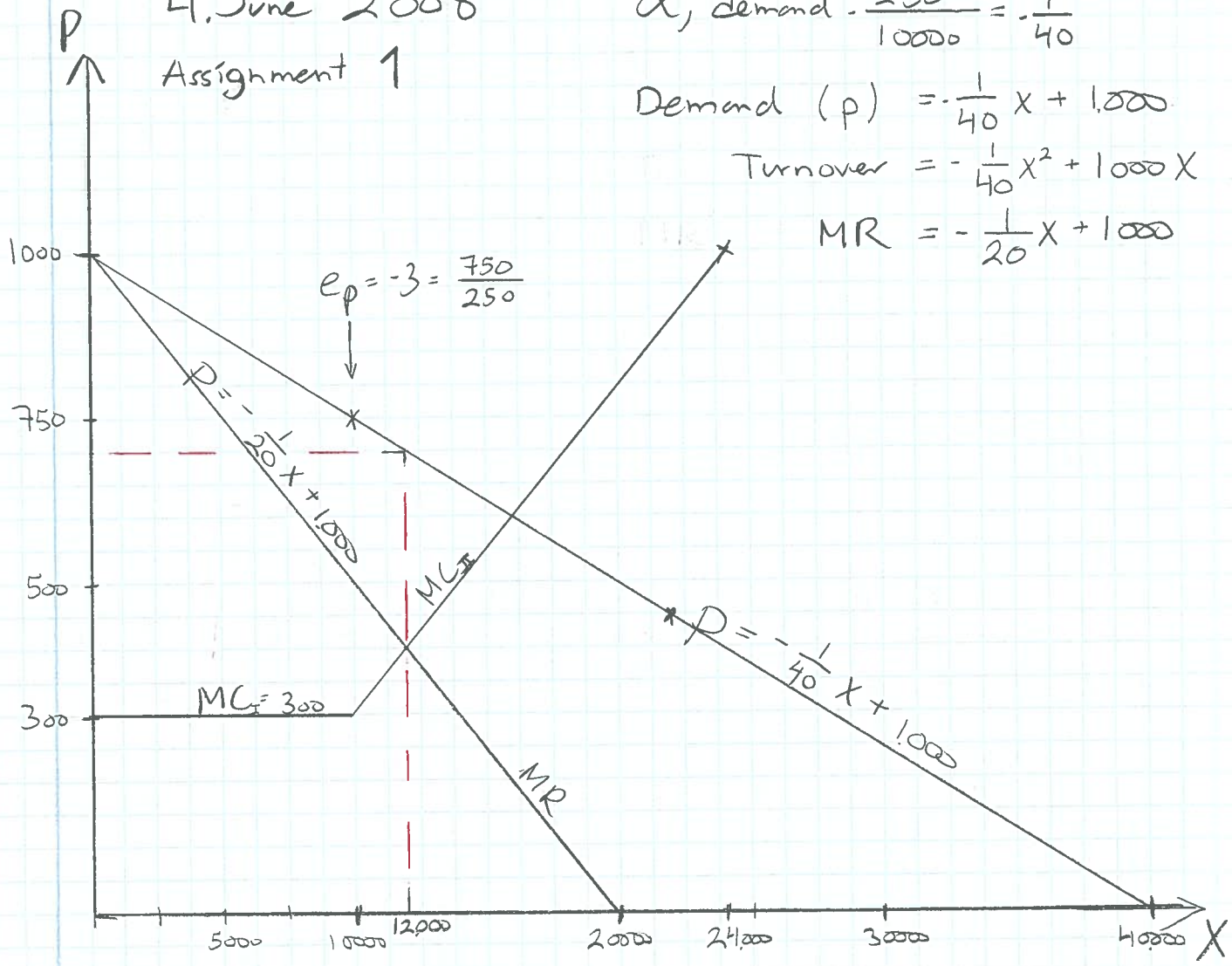
Assignment 1

α, demand $= \frac{250}{10000} = \frac{1}{40}$

Demand (p) $= -\frac{1}{40}X + 1.000$

Turnover $= -\frac{1}{40}X^2 + 1000X$

$MR = -\frac{1}{20}X + 1000$



$\alpha, MC = \frac{1000 - 300}{24000 - 10000} = \frac{700}{14.000} = \frac{1}{20}X$

(10,000 ; 300) $\quad 300 = \frac{1}{20} \times 10000 + b$

$300 = 500 + b$

$-200 = b$

1.1 $MC = p = \frac{1}{20}X - 200$

$MR = MC$

$-\frac{1}{20}X + 1000 = \frac{1}{20}X - 200$

$1200 = \frac{2}{20}X$

$24000 = 2x$

1.1 $\underline{12.000 = X}$

1.1 $p = -\frac{1}{40} \times 12000 + 1000 = \underline{700}$

	omsetning / Turnover $700 * 12.000$ =	8.400.000
	- Vo / VC $(300 * 10.000)$ $(350 * 2000)$ =	3.700.000
1.1	DB / CM	4.700.000

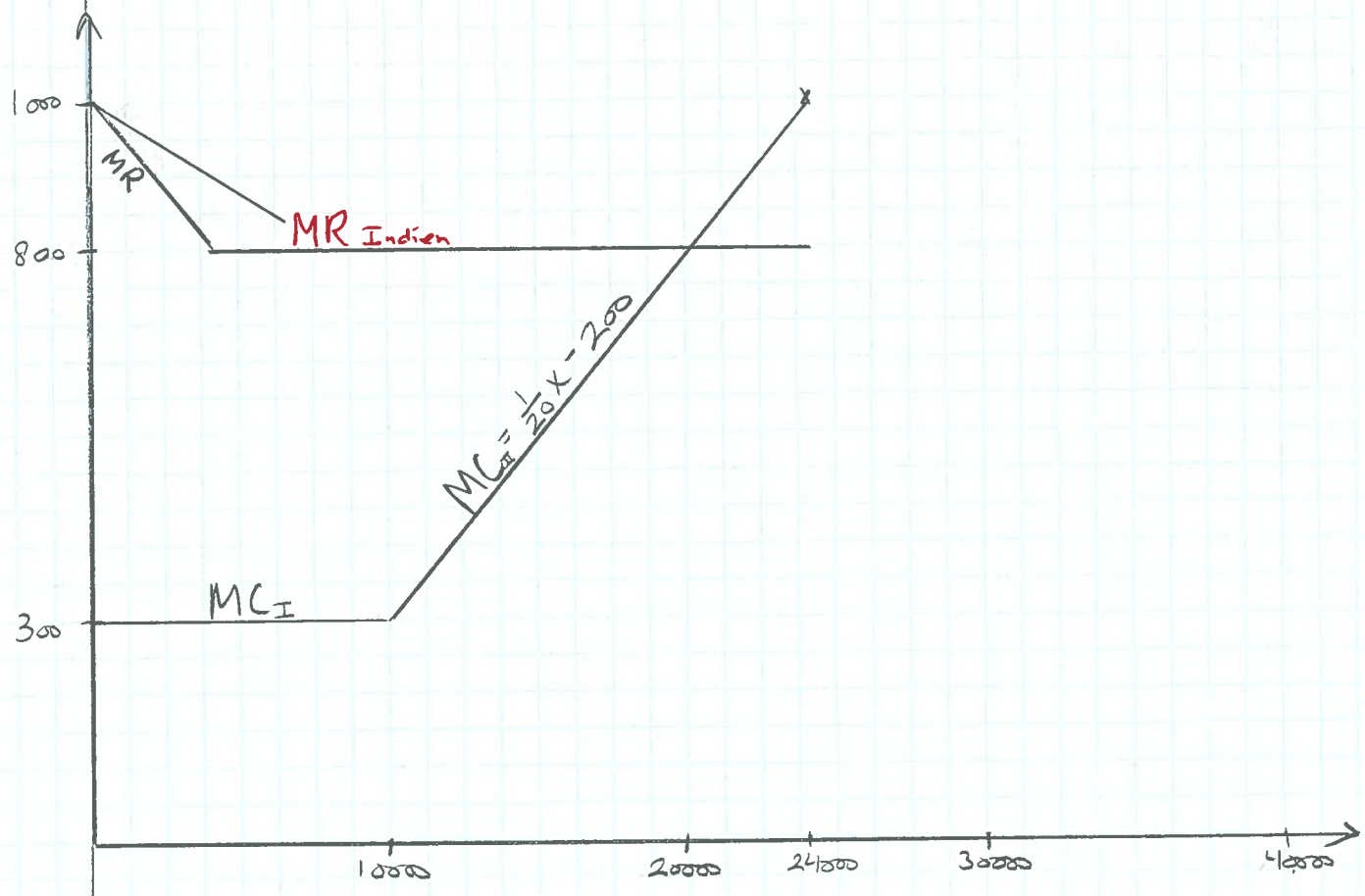
1.2

$$e_p \text{ optimum} = \frac{700}{300} = -2,3\overline{3} \quad \text{elastisk.}$$

1.3	DB / CM	4,700000
	- Activity based costs ABC	4.800.000
	DB / CM	- 100.000

CM is negative, stop production

1.4



1.5 15

$$MR_{Indien} = MC_{II}$$

$$800 = \frac{1}{20}X - 200$$

$$1000 = \frac{1}{20}X$$

$$20.000 = X \quad \text{total quantity}$$

$$MR_{DK} = MR_{Indien}$$

$$-\frac{1}{20}X + 1000 = 800$$

$$200 = \frac{1}{20}X$$

$$4000 = X \ DK \qquad \text{quantity India} = 20.000 - 4.000 = 16.000$$

$$price_{DK} = -\frac{1}{40} * 4000 + 1000$$

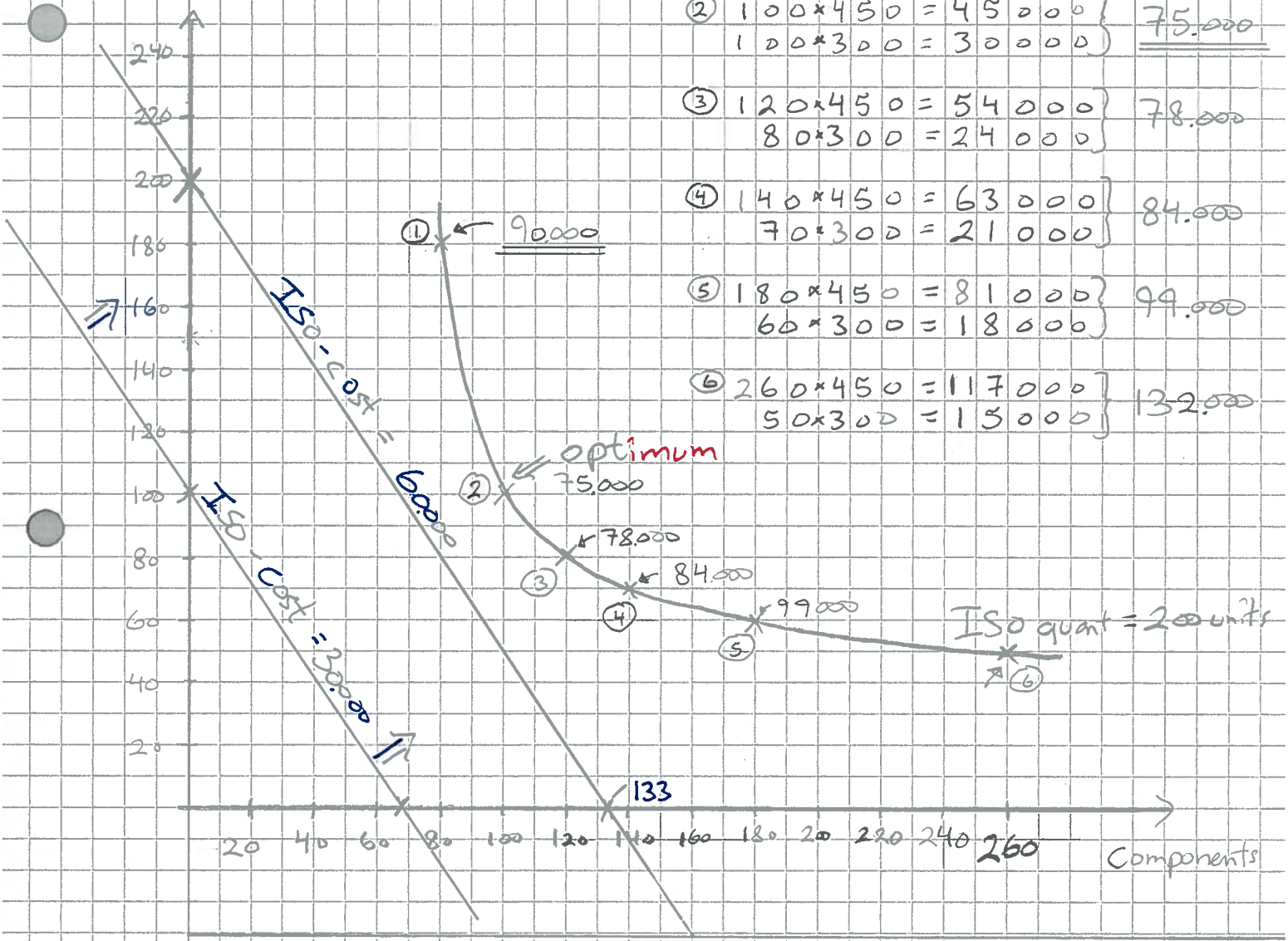
$$price_{DK} = 900$$

Omsætning / Turnover India	$800 * 16.000 =$	12.800.000
omsætning / Turnover DK	$900 * 4000$	3.600.000
Omsætning / Turnover Total		16.400.000
- VO / VC	$300 * 10.000$	3.000.000
	$(\frac{800+300}{2}) * 10.000$	5.500.000
DB / CM		7.900.000
- Faste / Fixed ABC		4.800000
Profit / overskud		3.100.000

Fastholde produktionen, continue production

Assignment 2

2.1



① $80 \times 450 = 36000$
$180 \times 300 = 54000$ } 90.000

② $100 \times 450 = 45000$
$100 \times 300 = 30000$ } 75.000

③ $120 \times 450 = 54000$
$80 \times 300 = 24000$ } 78.000

④ $140 \times 450 = 63000$
$70 \times 300 = 21000$ } 84.000

⑤ $180 \times 450 = 81000$
$60 \times 300 = 18000$ } 99.000

⑥ $260 \times 450 = 117000$
$50 \times 300 = 15000$ } 132.000

Random ISO cost:

$200 * 300 = 60.000$ (200 Machine hours)

$\frac{60000}{450} = 133,3\bar{3}$ components

Random ISO cost

$100 * 300 = 30.000$

$\frac{30000}{450} = 66,6\bar{6}$

2.2 Solution / Løsning:

100 Components and 100 Machine hours

Total cost 75.000

Assignment 3

"Før" / "Before"

Turnover / omsætning	2500 * 4.000	=	10.000.000
-VC / VO	800 * 4000	=	3.200.000
	1200 * 4000	=	4800000
CM / DB			2,000.000
- Fixed / Faste omk.	400 * 4000	=	1,600,000
Profit			400,000

"After" / "Efter"

Turnover / omsætning	2250 * 8,000	18,000,000
-VC / VO	800 * 2000	1,600,000
(300*0,2=60)	740 * 6000	4,440,000
	1200 * 8,000	9600000
CM / DB		2.360.000
- Fixed / Faste		1,600,000
Profit		760,000

3.1 Vi skal sælge 8,000 stk, vi tjener 360,000 ekstra i DB / Profit

We have to sell 8000 units, We earn 360,000 DK extra in CM.