

14 august 2008

opgave 1 / Assignment 1

$$\begin{array}{l|l} p = -\frac{1}{40}x + 400 & FC \quad 100.000 \\ oms = -\frac{1}{40}x^2 + 400x & VC \quad 100x \\ MR = -\frac{1}{20}x + 400 & TC \quad 100x + 100000 \\ & MC \quad 100 \end{array}$$

$$MR = MC$$

$$-\frac{1}{20}x + 400 = 100$$

$$300 = -\frac{1}{20}x$$

$$\underline{\underline{6000 = x}}$$

$$p = -\frac{1}{40} \times 6000 + 400$$

$$\underline{\underline{P = 250}}$$

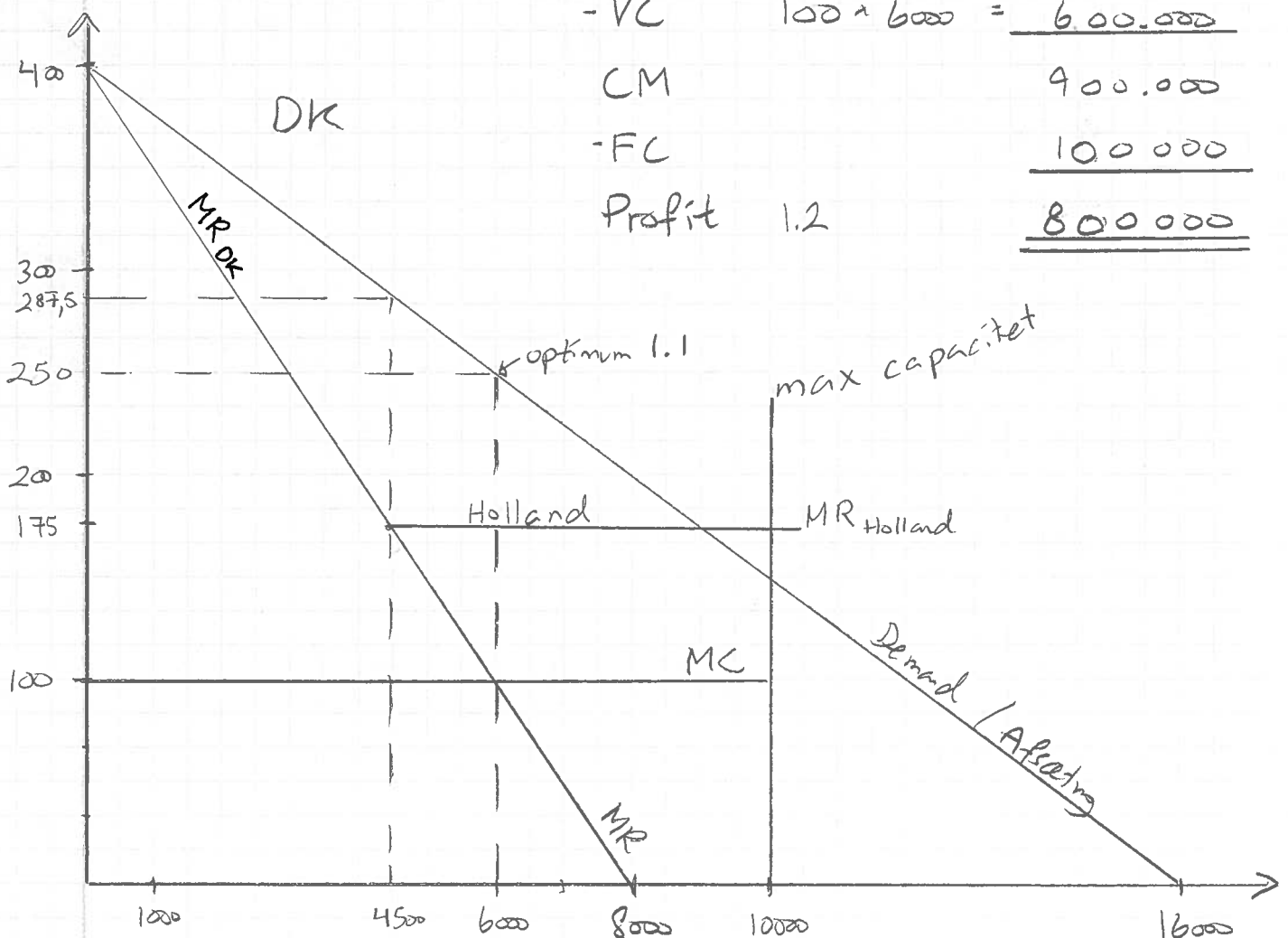
$$\text{Turnover } 250 \times 6000 = 1.500.000$$

$$-VC \quad 100 \times 6000 = \underline{600.000}$$

$$CM \quad 900.000$$

$$-FC \quad \underline{100.000}$$

$$\text{Profit } 1.2 \quad \underline{\underline{800.000}}$$



1.3

$$MR_{DN} = MR_{Holland}$$

$$-\frac{1}{20}x + 400 = 175$$

$$225 = -\frac{1}{20}x$$

$$\underline{\underline{4500 = x}}$$

$$p = -\frac{1}{40} \cdot 4500 + 400 = \underline{\underline{287,50}}$$

$$\text{Turnover}_{DN} \quad 287,5 \times 4500 = 1.293.750$$

$$\text{Turnover}_{Holland} \quad 175 \times 5500 = \underline{962.500}$$

$$\text{Total Turnover} \quad \underline{2.256.250}$$

$$-VC \quad 100 \times 10.000 = \underline{1.000.000}$$

$$CM / DB \quad \underline{1.256.250}$$

$$-Fixed / Faste \quad \underline{200.000}$$

$$1.4 \quad \text{Profit / overskud} \quad \underline{\underline{1.056.250}} \quad 1.4$$

$$1.5 \quad \text{Price} \quad 250$$

$$-VC / VE \quad \underline{100}$$

$$CM / DB \quad \underline{\underline{150}}$$

$$\frac{200.000}{150} = \underline{\underline{1.334 \text{ stk / units}}}$$

1.6

Other markets - andre markeder, Tyskland / Germany?

Change in MC if we start export.

competitors / Konkurrenter

Opgave 2 / Assignment 2

	Skateshirt X	Wintershirt Y	capacity	max X	max Y	$\alpha = \text{Alpha}$	Function
Machine 1	8	6	24.000	$\frac{24.000}{8} = 3.000$	$\frac{24.000}{6} = 4.000$	$-\frac{4.000}{3.000} = -1\frac{1}{3}$	$Y = -1\frac{1}{3}X + 4.000$
Machine 2	6	2	12.000	$\frac{12.000}{6} = 2.000$	$\frac{12.000}{2} = 6.000$	$-\frac{6.000}{2.000} = -3$	$Y = -3X + 6.000$

Price

-VC/VE

CM/DB

Random CM/DB
(4.000)

Random CM/DB
(135.000)

$\frac{4.000}{90} = 44\frac{4}{9}$ stk	1000 stk
1.500	$\frac{135.000}{40} = 3375$

$$-1\frac{1}{3}X + 4.000 = -3X + 6.000$$

$$1\frac{2}{3}X = 2.000$$

$$X = \frac{2.000}{1\frac{2}{3}}$$

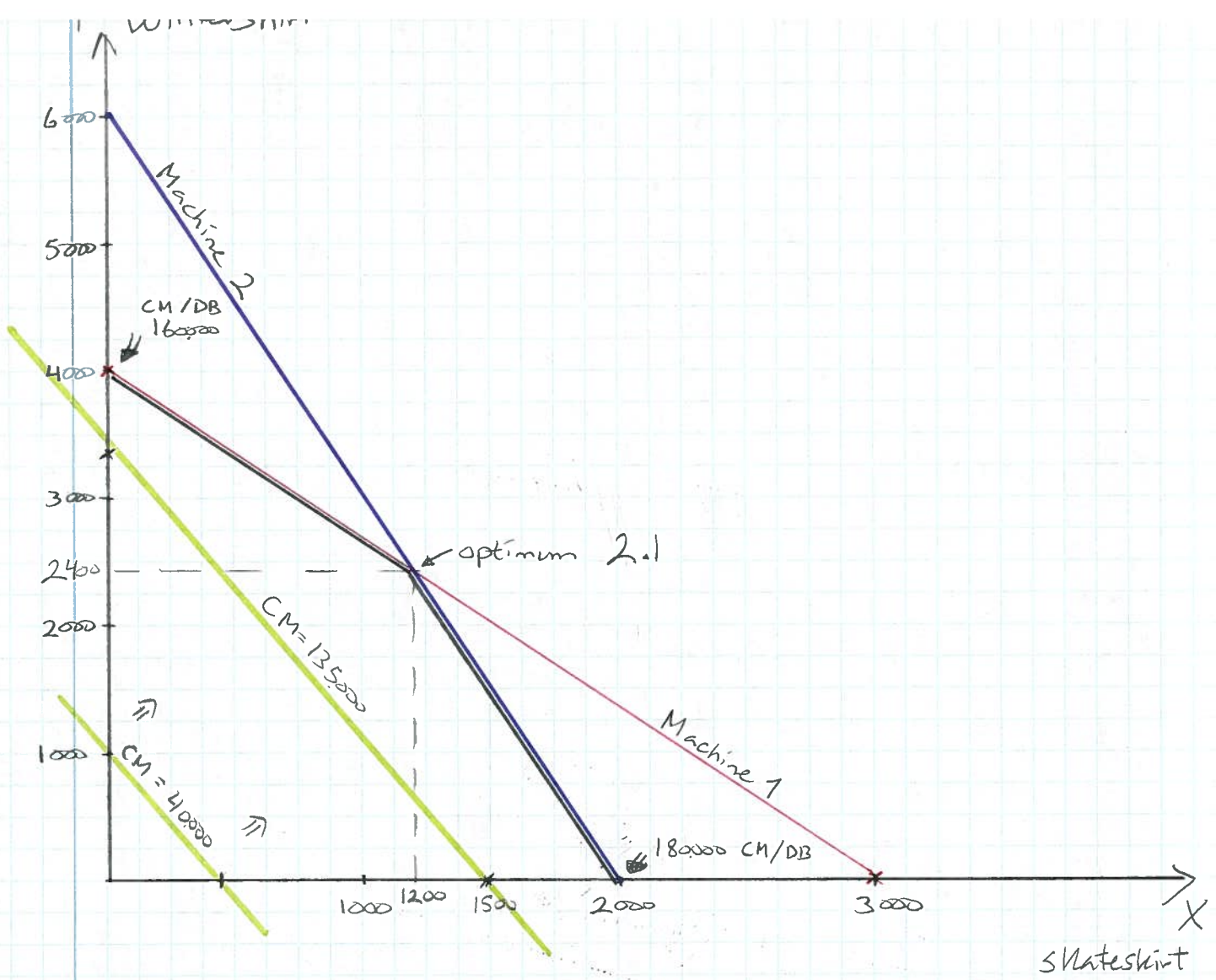
$$2.1 \quad X = 1200 \Rightarrow Y = -3 \cdot 1200 + 6000$$

$$Y = 2400$$

$$CM/DB = (1200 \cdot 90) + (2400 \cdot 40)$$

$$CM/DB = 108.000 + 96.000$$

$$2.1 \quad \underline{\underline{CM/DB = 204.000}}$$



Assignment 3 / opgave 3

$$\text{Fly } 2 \times 2500 = 5000$$

5 timer

$$\text{Bil } 1600 \text{ km} \times 2 = 1600$$

$$\text{Benzin } \frac{1600}{8} = 200 \text{ Lit.} \times 11,50 = 2300$$

Faste omk.:

$$\text{Afskrivning } 160.000$$

$$\text{Øvrige } \underline{15.000}$$

$$175.000 / 60.000 \text{ km} = 2,916 \text{ Kr pr km i faste}$$

$$2,916 \times 1600$$

$$\underline{4.666}$$

$$\text{Samlede omk. ved Kørsel i Bil. } \underline{\underline{6.966}}$$

10 timer

Hvis bilen måles imod flyet udelukkende mht. variable omk. er flyet dyrere $5000 - 2300 = 2700$ men man ofrer så også 5 timer ekstra i bilen hvor man ikke kan arbejde. I de variable omk mht. bilen er ikke medtaget slid på dæk og service pr. f.eks. 15000 km. Hvis man kun sender 1 person til messen og man ikke kan kombinere turen med andre aktiviteter (f.eks.: besøg af kunder) vælger jeg løsningen at flyve.