

Oppgave 1a)

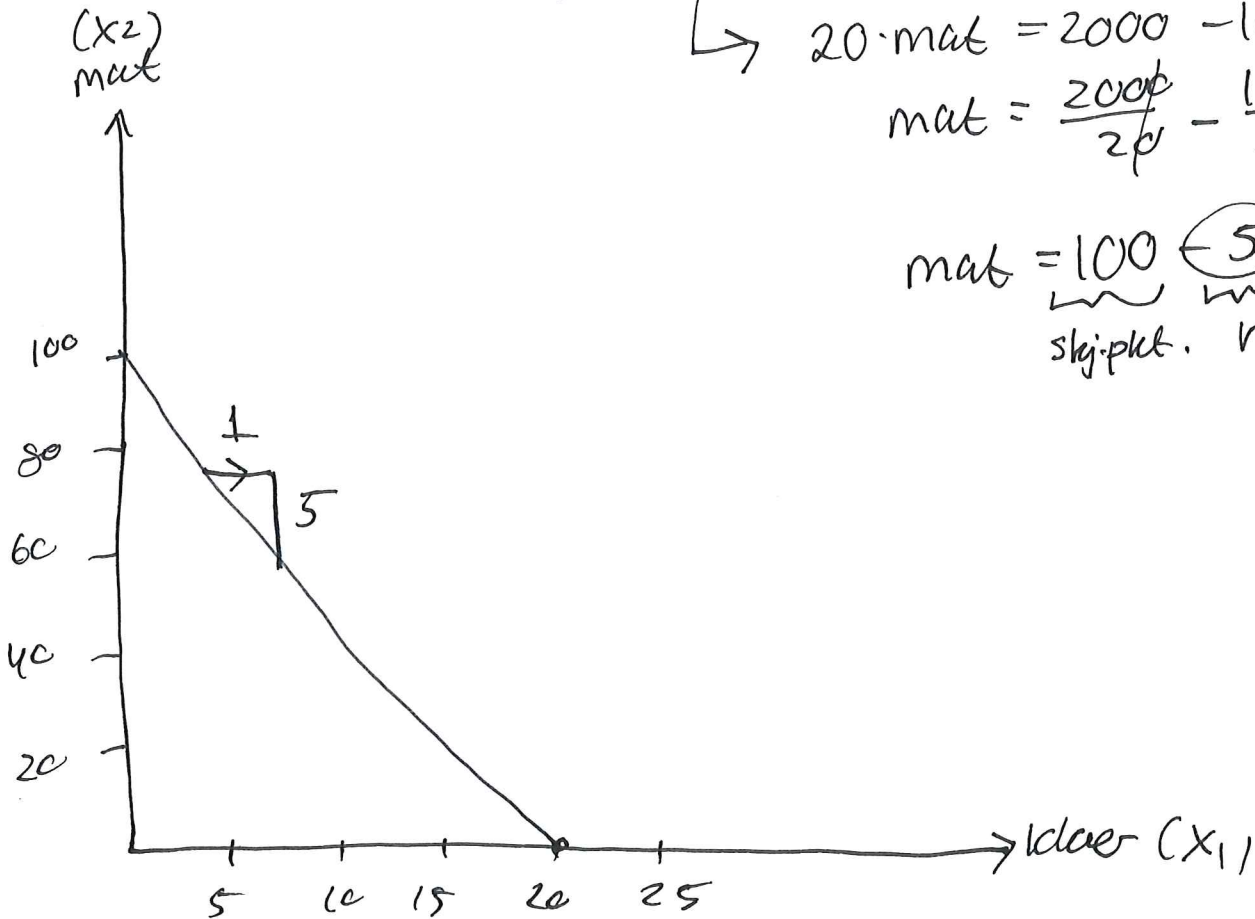
$$p_1 \cdot x_1 + p_2 \cdot x_2 = m$$

$$m = 2000$$

$$\left. \begin{array}{l} x_1: \text{klaer} \\ x_2: \text{mat} \end{array} \right\} \begin{array}{l} p_1 = 100 \\ p_2 = 20 \end{array} \quad 100 \cdot \text{klaer} + 20 \cdot \text{mat} = 2000$$

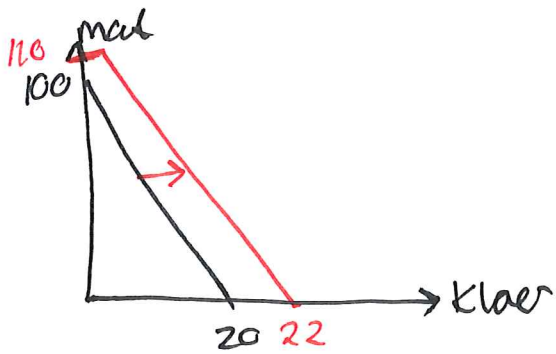
$$\begin{aligned} \rightarrow 20 \cdot \text{mat} &= 2000 - 100 \cdot \text{klaer} \\ \text{mat} &= \frac{2000}{20} - \frac{100}{20} \text{klaer} \end{aligned}$$

$$\text{mat} = \underbrace{100}_{\text{skj\u00e5p\u00e9t.}} \underbrace{(-5)}_{\text{hel\u00f8n.}} \text{klaer}$$



1b

(i) m: 2000 → 2200

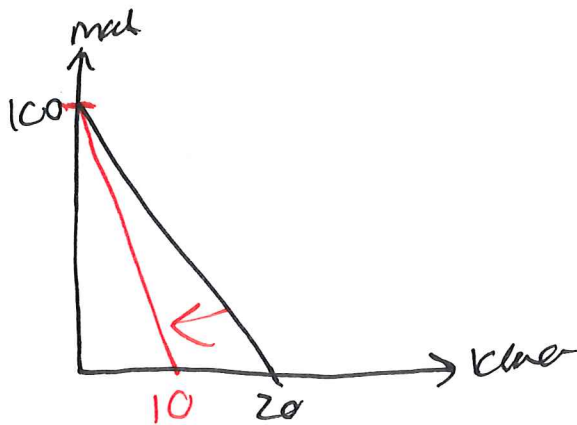


$$100 \cdot \text{klaer} + 20 \cdot \text{mat} = 2200$$

$$\rightarrow \frac{20 \cdot \text{mat}}{20} = \frac{2200}{20} - \frac{100 \text{ klaer}}{20}$$

$$\text{mat} = \underbrace{110}_{\text{nytt sky.pkt}} - \underbrace{5 \text{ klaer}}_{\text{samme heln.}}$$

ii) P_{klaer} ↑ : 100 → 200

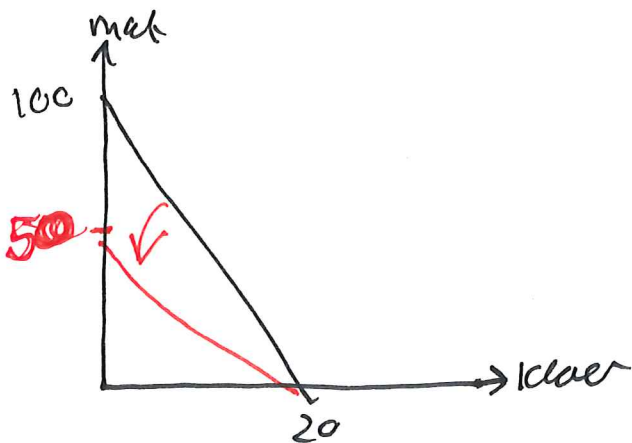


$$200 \cdot \text{klaer} + 20 \cdot \text{mat} = 2000$$

$$\rightarrow \frac{20 \text{ mat}}{20} = \frac{2000}{20} - \frac{200 \cdot \text{klaer}}{20}$$

$$\text{mat} = \underbrace{100}_{\text{samme sky.pkt}} - \underbrace{10 \cdot \text{klaer}}_{\text{heln dobbelt så brukt}}$$

iii) P_{mat} ↑ : 20 → 40

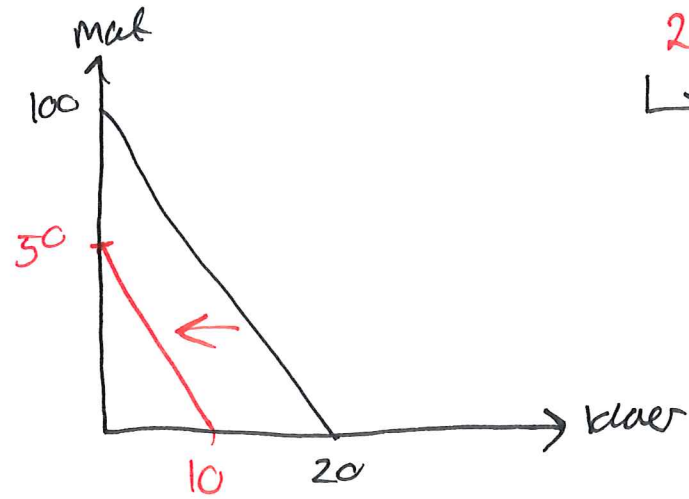


$$100 \cdot \text{klaer} + 40 \text{ mat} = 2000$$

$$\rightarrow \frac{40 \text{ mat}}{40} = \frac{2000}{40} - \frac{100 \text{ klaer}}{40}$$

$$\text{mat} = \underbrace{50}_{\text{nytt sky.pkt}} - \underbrace{2,5 \text{ klaer}}_{\text{slakere heln.}}$$

(iv) $P_{kluer} \uparrow$ 100 $\rightarrow$ 200
 $P_{mat} \uparrow$ 20 $\rightarrow$ 40

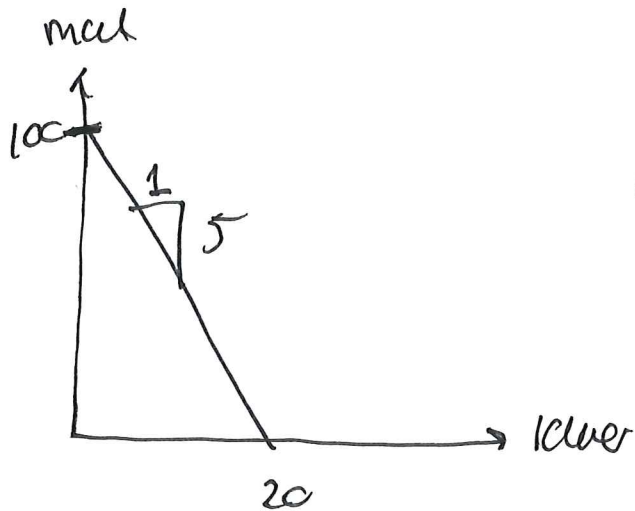


$$200 \cdot kluer + 40 \cdot mat = 2000$$

$$\rightarrow \frac{40 \cdot mat}{40} = \frac{2000}{40} - \frac{200 \cdot kluer}{40}$$

$$mat = \underbrace{50}_{\text{slipplu labore}} - \underbrace{5 \cdot kluer}_{\text{samme hehn.}}$$

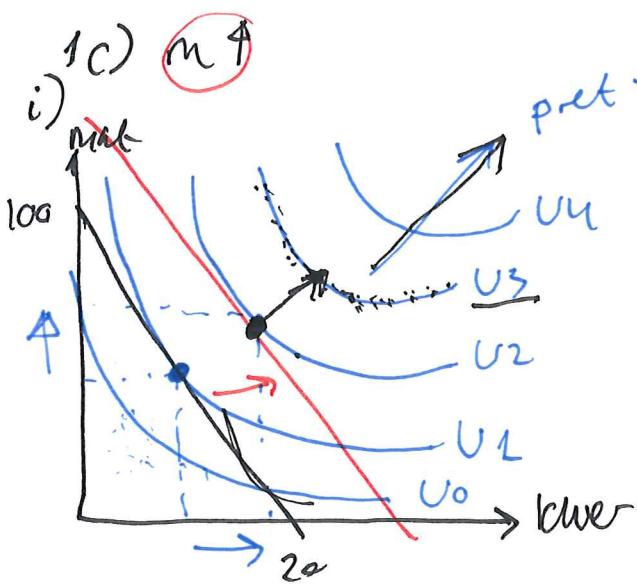
(v) $P_{kluer} \rightarrow 200$
 $P_{mat} \rightarrow 40$
 $m \rightarrow 2000 \rightarrow 4000$



$$200 \cdot kluer + 40 \cdot mat = 4000$$

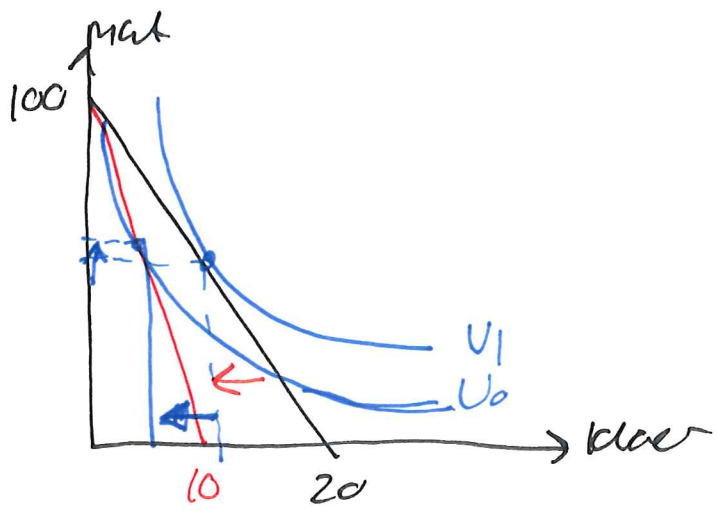
$$\rightarrow \frac{40 \cdot mat}{40} = \frac{4000}{40} - \frac{200 \cdot kluer}{40}$$

$$mat = 100 - 5 \cdot kluer$$



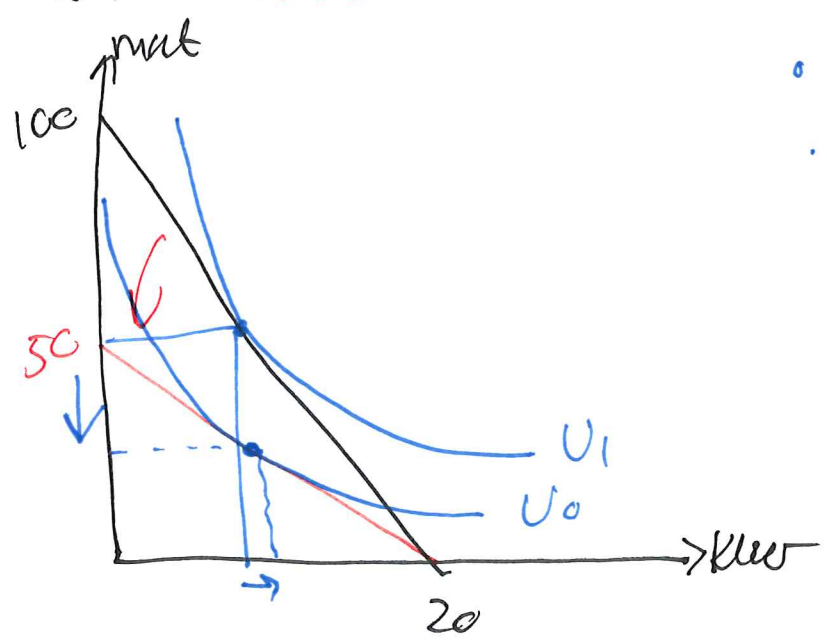
Økt konsum av begge varere

ii) $P_{klee} \uparrow$



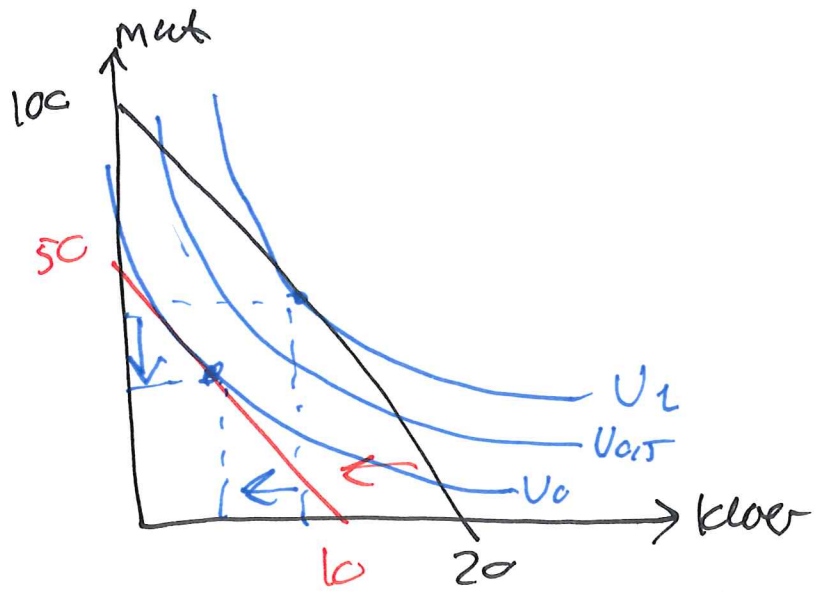
- Konsumer mindre klee (klee er blitt dyrere)
- Konsumer litt mer mat.

iii) $P_{mat} \uparrow$

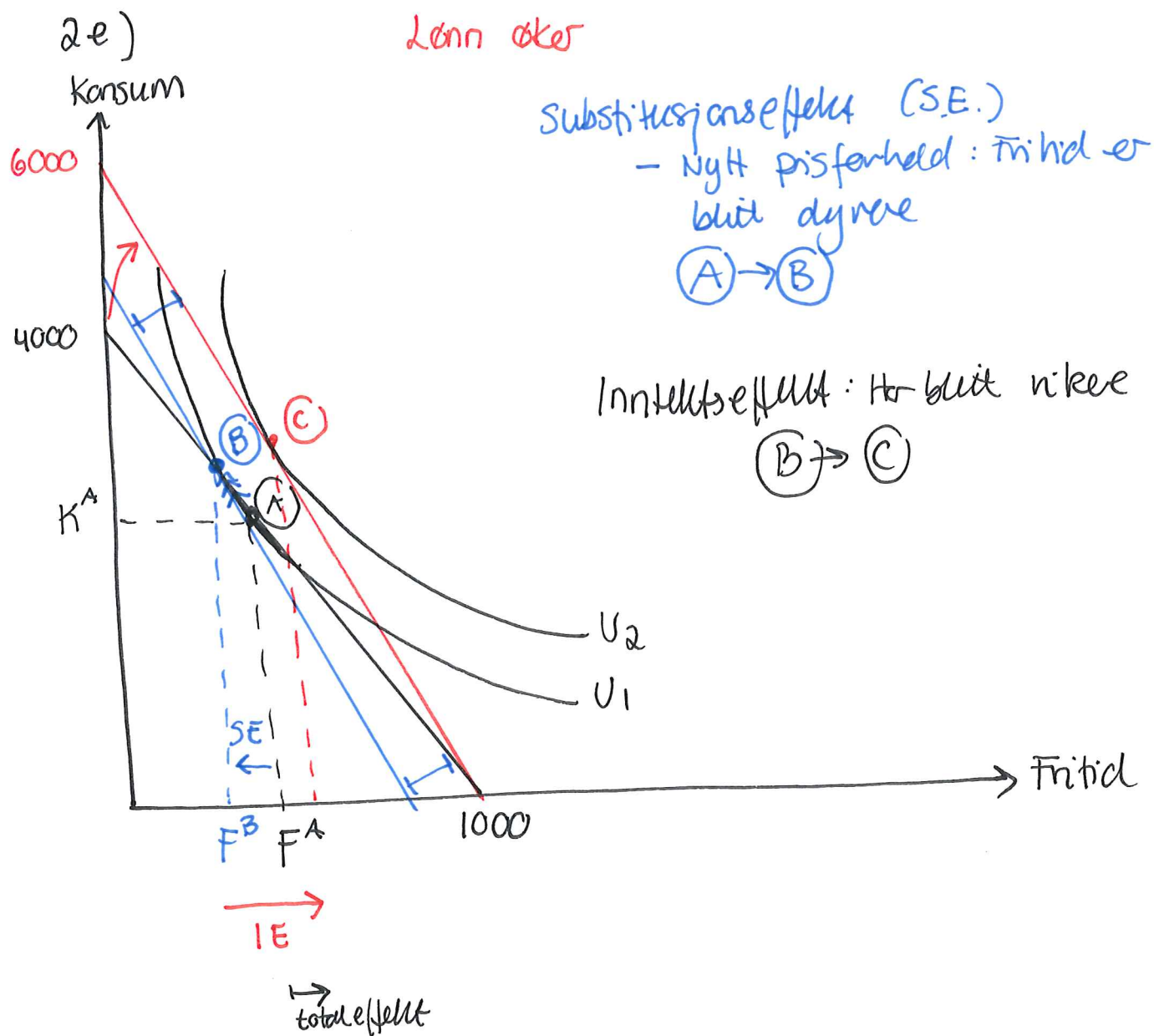


- Konsum mat $\downarrow$
 - Konsum klee $\uparrow$
- ↑ ikke alltid hjelpe.

(iv) Begge priere dobles



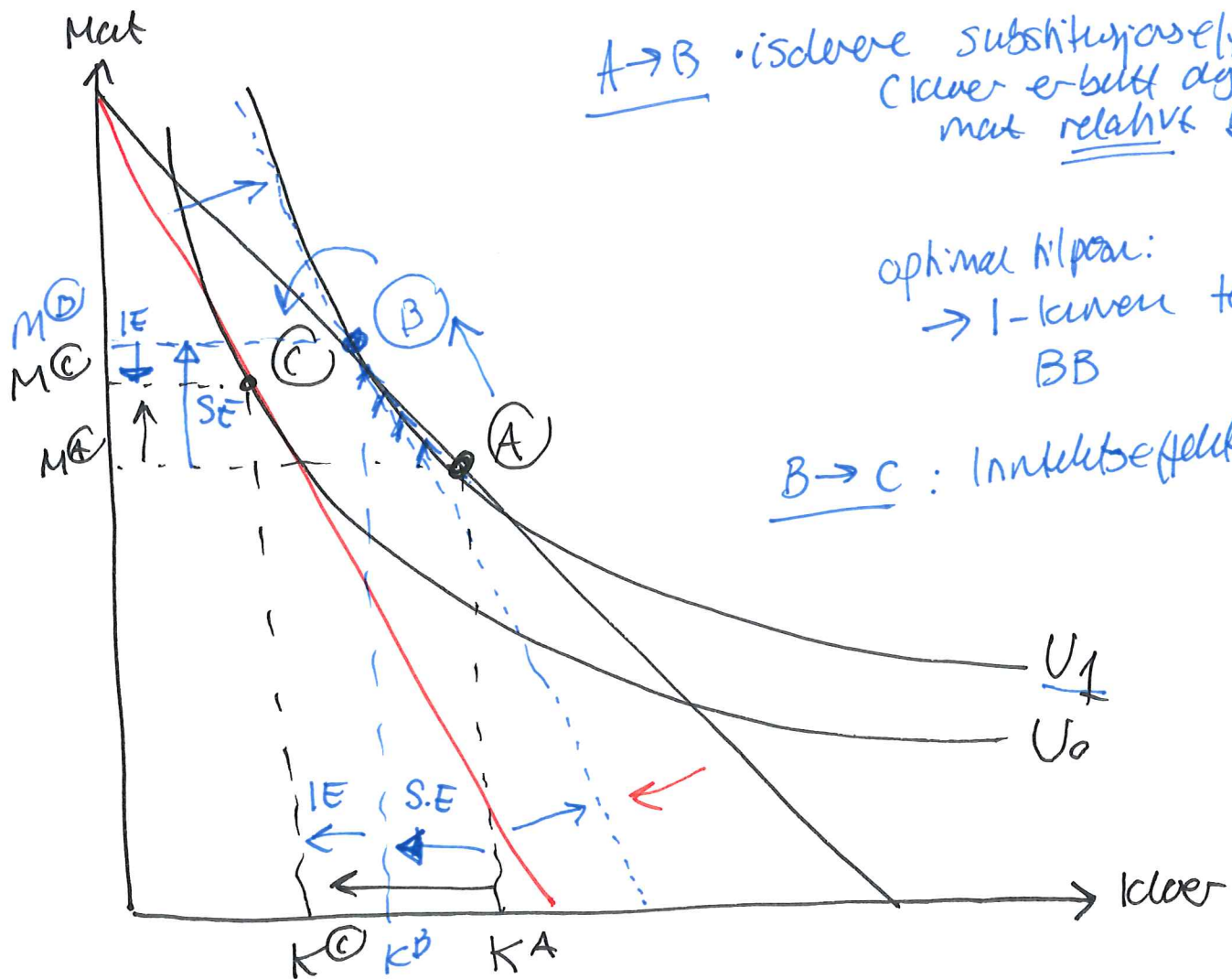
kloer ↓
mat ↓



S.E.: Trekker i retning av mindre fritid (og mer arbeid)

I.E.: Har blitt rikere
 $\Rightarrow$ Fritid er et normalt gode
 $\Rightarrow$ mer fritid.

• klær blir dyrere → Illustrer S.E. og I.E.

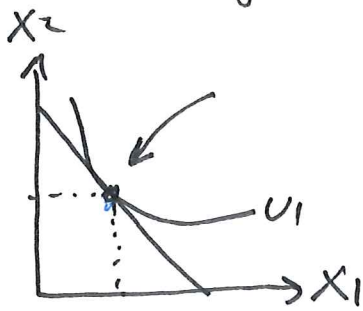


A → B : isolerte substitusjonseffekter.
(klær er blitt dyrere, men relativt billigere)

optimal tilpassing:
→ I-kurven tangenter BB

B → C : Inntektseffekter.

Fra nyttemaksimering $\rightarrow$ Etherspædeskurver



$\Rightarrow$

