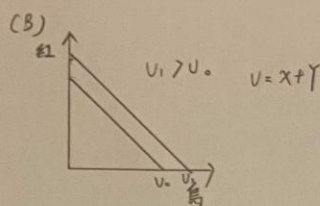
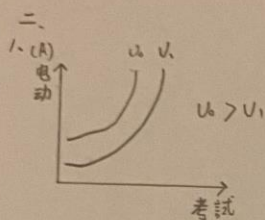


- 一、
1. D C D A
 5. C D A C
 9. A B C B
 13. D ~~D~~ B A



2.

(1) $300 = 20X + 10Y$

$$\frac{\frac{1}{3}X^{-\frac{2}{3}}Y^{\frac{1}{3}}}{\frac{2}{3}X^{\frac{1}{3}}Y^{-\frac{2}{3}}} = \frac{P_X}{P_Y} = \frac{Y}{2X}$$

$\rightarrow X = 5 \quad Y = 20$

(2) $X = 15, Y = 0$

(3) $300 = 20X + 10Y$

$$2X = Y$$

$$20Y = 300$$

$$Y = 15$$

$$X = \frac{15}{2}$$

3.

(1) $\text{Max } U = f(X, Y) = X^{\frac{1}{2}}Y^{\frac{1}{2}}$

$$300 = 20X + 10Y$$

$$\rightarrow X = 5 \quad Y = 20$$

$MRS_{XY} = \frac{Y}{2X} = 1 \quad Y = 2X$

$$300 = 30X$$

$$X = 10 \quad Y = 20$$

$\hookrightarrow 300 = 10X + 10Y$

$Y = 2X$

$\rightarrow X = 10 \quad Y = 20$

\Rightarrow 總效果 +5 個單位

4.

(1) $MRS_{XY} = \frac{Y}{2X} = 2$

$$Y = 4X \quad X = \frac{Y}{4}$$

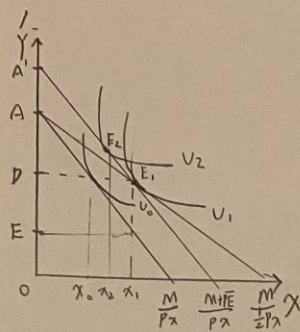
(2) $Y = 4X$ 代入 $20X + 10Y = m$

$$60X = m \quad X = \frac{m}{60}$$

(3) $Y = \frac{m}{10}$

(4) $X = \frac{100}{P_X}$

三

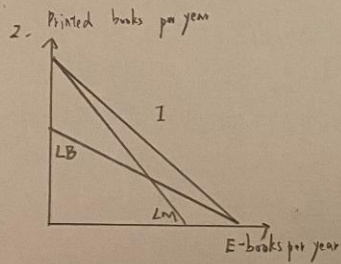


補貼者角度,所得補貼優於價格補貼

$$U_2 > U_1 > U_0$$

若鼓勵長期消費數量,價格補貼優於所得補貼

$$X_1 > X_2 > X_0$$



消費者買相對便宜的那一種。美國稅輕,電子書便宜,所以買電子書;德國稅重,所以買紙本。