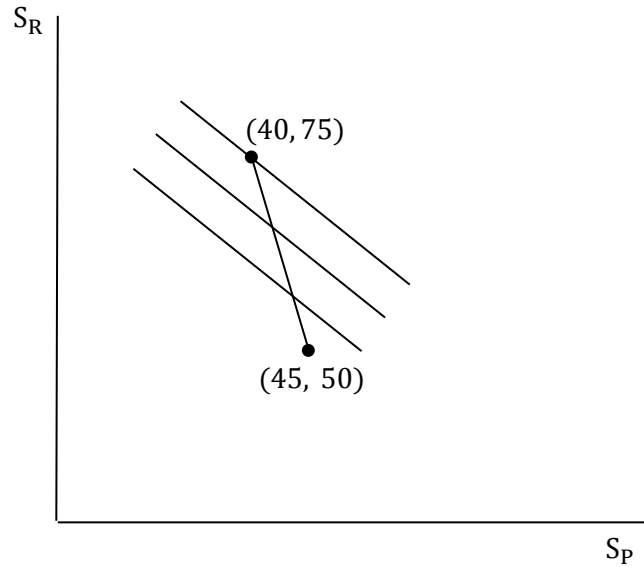


- b) End points are: $(S_P, S_R) = (40, 75)$ when $X_R = 10$
 $(S_P, S_R) = (50, 45)$ when $X_P = 10$
slope of transformation curve $= -3$



- c) $S_P = 45$ and $S_R = 60$
- d) $40 + X_P = 45 + 3(10 - X_P) \rightarrow X_P = 8.75$ and $X_R = 1.25$
- e) All in rich; since slope of iso-score lines is -1 , the highest iso-score line is reached at $(S_P, S_R) = (40, 75)$ when $X_R = 10$ (refer to graph)
- f) All in poor; since each extra dollar in poor school is more productive than in rich school
- g) $X_R = 3.75$ $X_P = 6.25$
 $S_R = 56.75$ $S_P = 46.25$

Chapter 11

Exercise 11.1

- a) Indirect utility function $= \frac{1}{2} y p^{-\frac{1}{2}} a^{\frac{1}{2}}$
- b) Utility rises when y rises; utility falls when p rises; utility rises when a rises
- c) $p = \frac{1}{4} \frac{y^2 a}{u^2}$
- p rises when a rises; p rises when y rises

e) p rises when a rises; amenity lowers cost and hence p must rise to offset this benefit.

f) $y = a^{\frac{2}{3}(\theta - \frac{1}{2})}(2u)^{\frac{2}{3}}$

g) $\theta < 0 \rightarrow a$ rises as y falls
 $\theta > 0$ and large $\rightarrow a$ rises as y rises
 $\theta > 0$ and small $\rightarrow a$ rises as y falls

h) $p = a^{\frac{4\theta}{3} + \frac{1}{3}}(2u)^{-\frac{2}{3}}$

$\theta > 0 \rightarrow p$ rises as a rises
 $\theta < 0$ and close to zero $\rightarrow p$ rises as a rises
 $\theta < 0$ and far from zero $\rightarrow p$ falls as a rises

i) If the amenity effect on production is small, when a rises $\rightarrow p$ rises and y falls.

j) Results are same as those from the diagrammatic analysis.