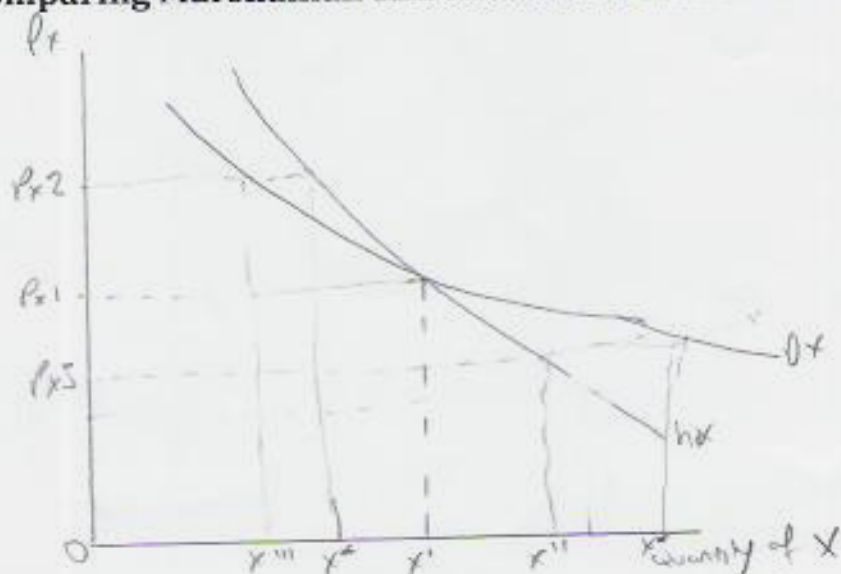


Comparing Marshallian and Hicksian demand curves:



The compensated (H_x) and uncompensated (D_x) demand curves intersect at P_{x1} since x' is demanded under each concept. For prices above P_{x1} the individual's income has increased with the compensated demand (to help the person stay on the same utility curve) so more of X is demanded than with the uncompensated demand curve. For prices below P_{x1} income is reduced for the compensated curve (to prevent an increase in utility from the lower price) so less is demanded than with the uncompensated demand curve. The Marshallian demand curve D_x is flatter because it incorporates both the substitution effect and the income effect reinforcing each other. However this wouldn't happen for an inferior good when the income and substitution effects are opposite and thus make the Marshallian demand curve relatively steeper, whereas the Hicksian H_x curve reflects only the substitution effect.

- In general for a normal good the compensated demand curve is somewhat less responsive to price changes than the uncompensated demand curve because uncompensated Marshallian reflects both substitution effects and the compensated Hicksian reflects only substitution effect.

A mathematical analysis of the relationship between Marshallian and Hicksian demand curves.

Expenditure function: which is the function that gives the minimum expenditure necessary to obtain utility U given prices P_x, P_y .