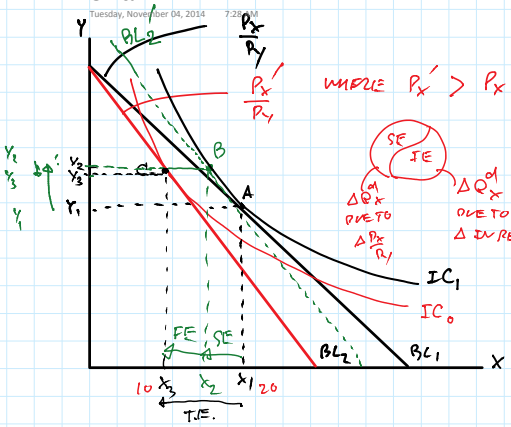
SE & IE

Tuesday, November 04, 2014 7:28 AM



WHERE $P_x' > P_x$

SE
IE
ΔQ_x^d DUE TO $\Delta \frac{P_x}{P_y}$
ΔQ_x^d DUE TO Δ IN REAL INCOME

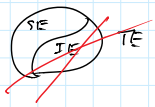
SUPPOSE X AND Y ARE NORMAL GOODS.

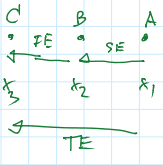
POINT OF DEPARTURE:
OLD CHOICE, $A(X_1, Y_1)$
SUPPOSE THAT P_x RISES.
NEW CHOICE IS $C(X_3, Y_3)$

RECALL THAT

$\Delta Q_{x,TE}^d = \Delta Q_{x,\text{VIA S.E}}^d + \Delta Q_{x,\text{VIA IE}}^d$

$-10 \quad (-6) \quad (-4)$





RECALL THAT $IE = \Delta Q_x^d$ DUE TO Δ IN REAL INCOME OR Δ IN PURCHASING POWER, WHEN THE BUYER FACES W/ THE NEW RELATIVE PRICE.

TO REMOVE IE, WE ASK THE FOLLOWING QUESTION:

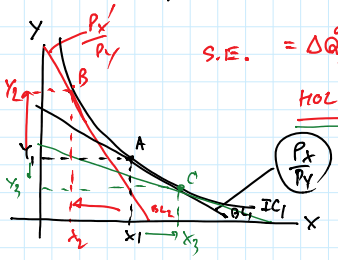
> HOW MUCH MONEY INCOME THIS GUY NEEDS IN ORDER TO GET BACK TO HIS ORIGINAL UTILITY LEVEL, NAMELY ON IC_1, WHEN HE FACE W/ THE NEW RELATIVE PRICE?

TO REMOVE IE, WE CONSTRUCT AN IMAGIARY BUDGET LINE W/ 2 PROPERTIES:

① IT PARALLELS W/ THE NEW BL (BL_2)
& ② IT TANGENTS W/ THE OLD IC (IC_1)

} TECHNIQUE TO REMOVE IE.

ABOUT S.E.



S.E. $= \Delta Q_x^d$ WHEN $\frac{P_x}{P_y}$ CHANGES, HOLDING UTILITY CONSTANT.

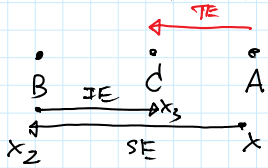
CASE 2: WHEN X IS AN INFERIOR GOOD,

$P_x \uparrow$
- $\frac{P_x}{P_y} \uparrow$ → SHE BUYS LESS OF X ($Q_x^d \downarrow$) AND MORE OF Y (S.E)
- HER PURCHASING POWER OR REAL INCOME FALLS :(→ SHE BUYS MORE OF X ($Q_x^d \uparrow$)

} $Q_x^d \downarrow$ (WHEN SE > IE)

\+ X IS AN INFERIOR

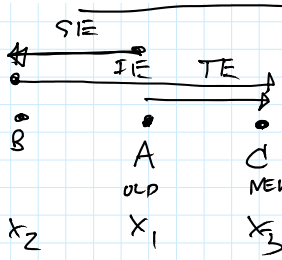
DIAGRAM? LOOK AT PALMY'S TUTORIAL SESSION.



WHEN X IS AN INFERIOR GOOD.

CASE 3 WHEN X IS A GIFFEN GOOD

SIE



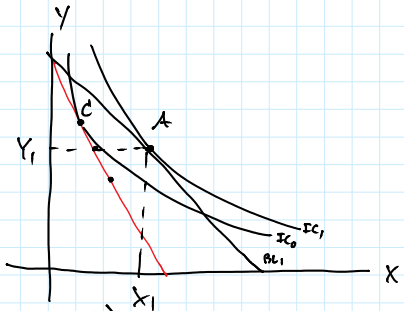
HERE, IE > SE.

SO, WHEN $P_x \uparrow$, $Q_x^d \uparrow$!!!

LAW OF DEMAND IS VIOLATED !

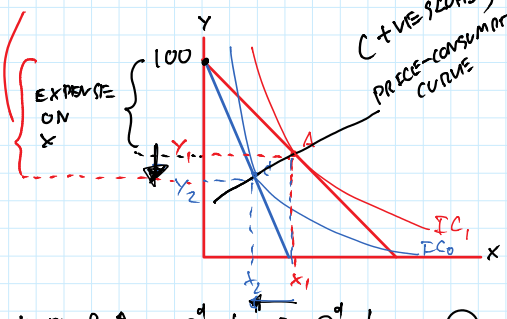
DIY : TRY TO DRAW A DIAGRAM FOR THIS CASE.

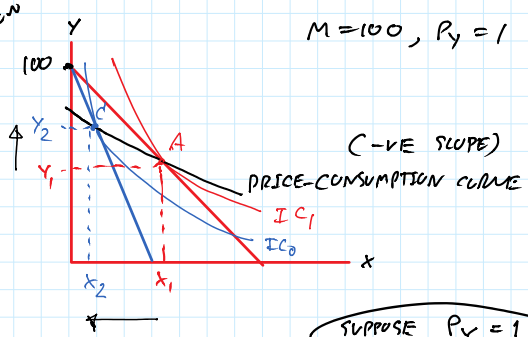
YOUR DOUBT...



NEW EXPENSE ON X (LARGER)

(+VE SLOPE) PRICE-CONSUMPTION CURVE





$M = 100$, $P_y = 1$

WHEN $P_x \uparrow$, $Q_x^d \downarrow$ & $Q_y^d \downarrow$ — (1)

TOTAL EXPENDITURE ON X IS INCREASING — (2)

SUPPOSE $P_Y = 1$.

SO, PRICE ELASTICITY OF DEMAND FOR GOOD X < 1 !!!

THAT IS $\%\Delta Q_x^d < \%\Delta P_x$

$|E| = \left|\frac{\%\Delta Q}{\%\Delta P}\right|$

EX: $P_1 = 100$, $Q_1 = 100$ → TE = 10000 RUPEE

$P_2 = 110$, $Q_2 = 95$ → TE = 10450 RUPEE

$\%\Delta P = 10$, $\%\Delta Q = 5$

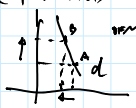
$\%\Delta P > \%\Delta Q$

$|E| = \left(\frac{5}{10}\right| = \frac{1}{2} = 0.5$

CONCLUSION #1

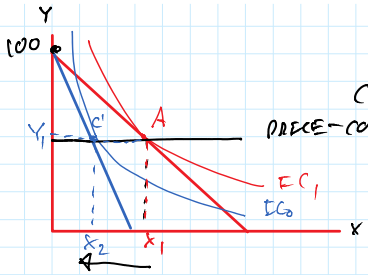
UPWARD SLOPING PCC IMPLIES THAT PRICE ELASTICITY OF DEMAND FOR GOOD X IS LESS THAN 1.

(DEMAND IS PRICE-INELASTIC)



DEMAND FOR X IS PRICE-INELASTIC.

$\%\Delta Q < \%\Delta P$ → TE ON X ↑ WHEN $P_x \uparrow$.



(SLOPE = 0)

PRICE-CONSUMPTION CURVE

$P_X X + Y = M$

So, $P_X X = M - Y$.

($P_X X$: EXPENSES ON GOOD X)

EX: $M = 100$

$Y = 30$ UNITS

So $P_X \cdot X = 100 - 30 = 70$.