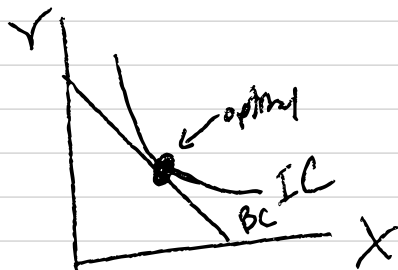


Dylan Blad
ECN 2316

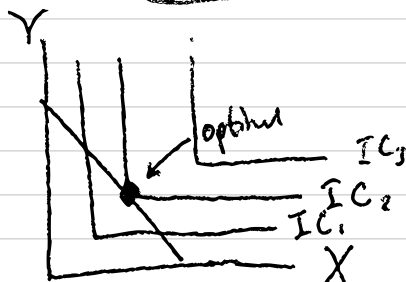
Lecture 7: Individual Demand

Consumer Choice



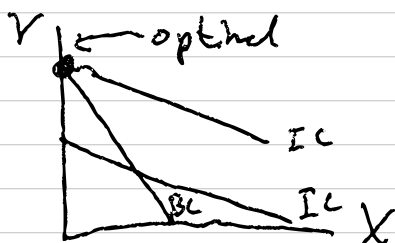
$$\frac{MU_x}{MU_y} = \frac{P_x}{P_y}, \text{ solve for } X \text{ or } Y, \text{ plug into BC}$$

rational consumer,
diminishing marginal
utility

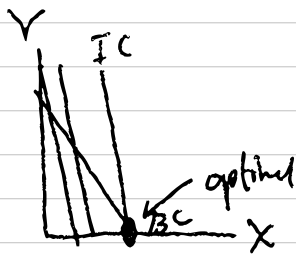


Consume at corner
(depends on ratio, but
ex. $X = Y$)

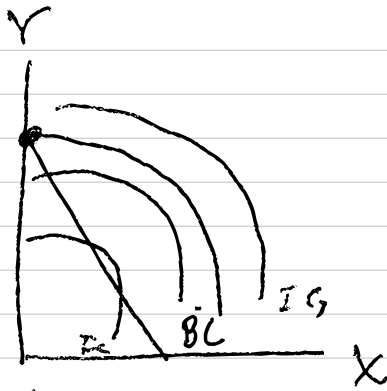
Perfect complements



Perfect Subst^y



} Corner
Solution



No DMU

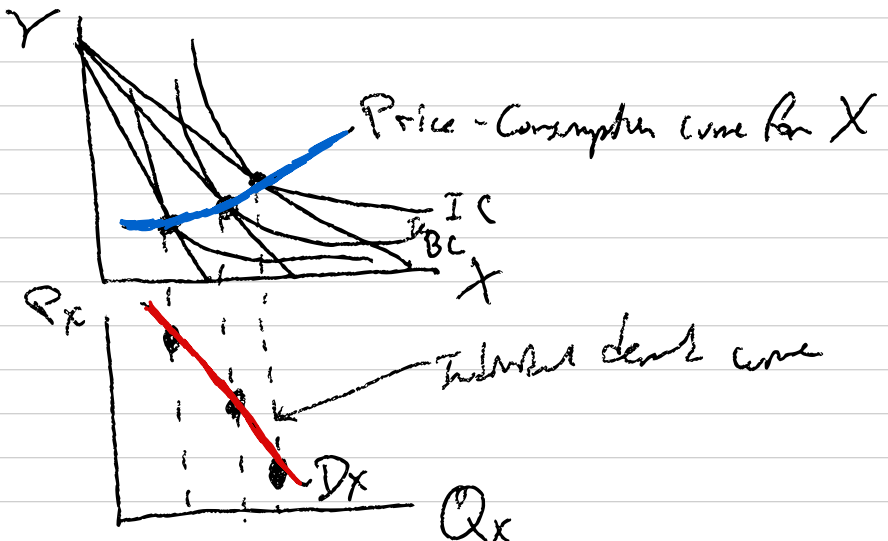
Price Consumption Curve

- Utility maximizing combos as price of 1 change

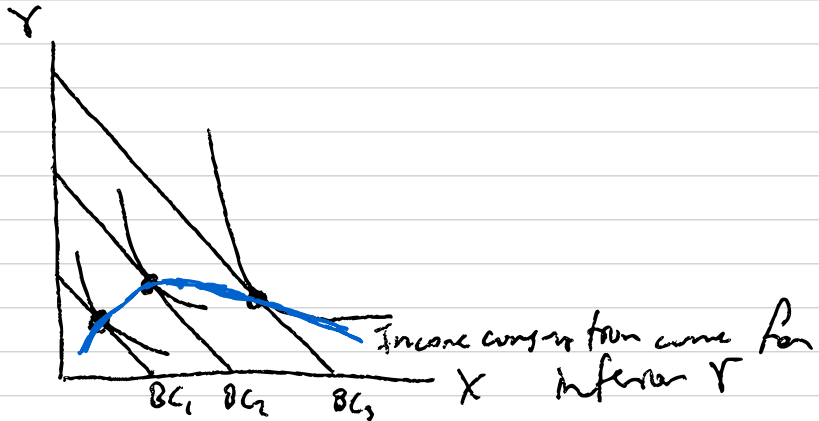
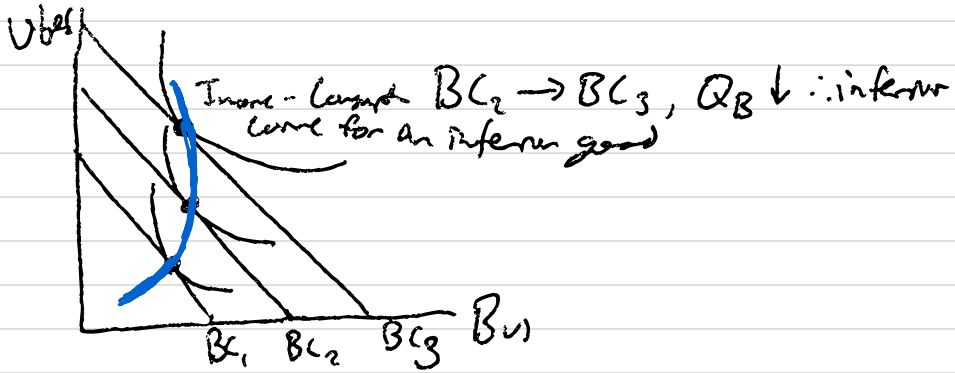
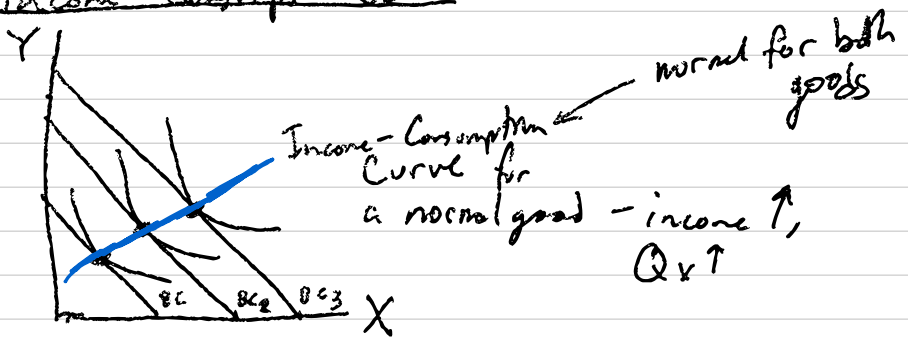
Income Consumption Curve

- Utility max combos as income changes

Price Consumption Curve



Income-Consumption Curve



Practice

1)

$$\frac{Y}{4X} = \frac{1}{2}$$

$$Y = 2X$$

$$2X + 4Y = 100$$

$$2X + 8X = 100$$

$$\boxed{\begin{array}{l} X = 10 \\ Y = 20 \end{array}}$$

2) $\frac{Y}{4X} = \frac{P_x}{4}$

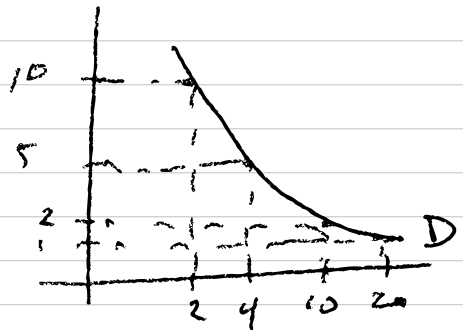
$$4Y = 4XP_x$$

$$XP_x + 4XP_x = 100$$

$$XP_x = 20$$

$$\boxed{X = \frac{20}{P_x}}$$

$$\boxed{Q_x = \frac{20}{P}}$$



Income and Substitution Effects

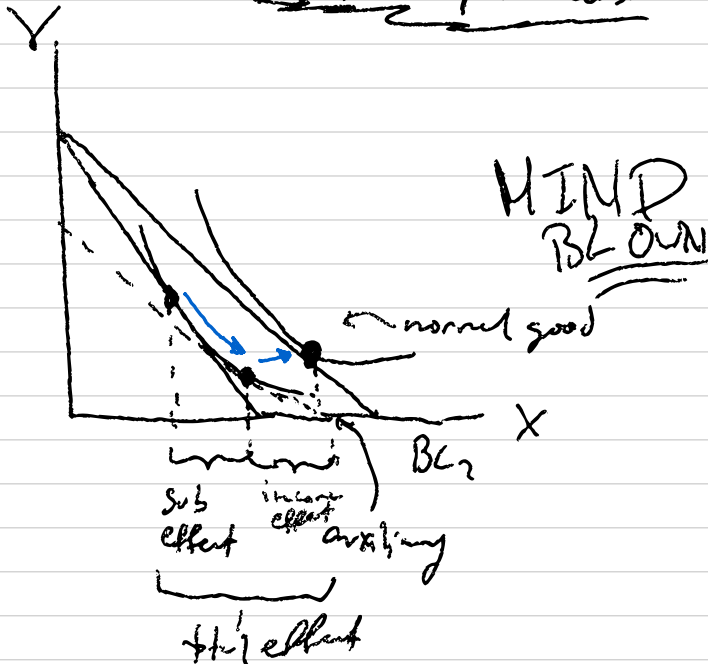
Decrease in P has 2 effects:

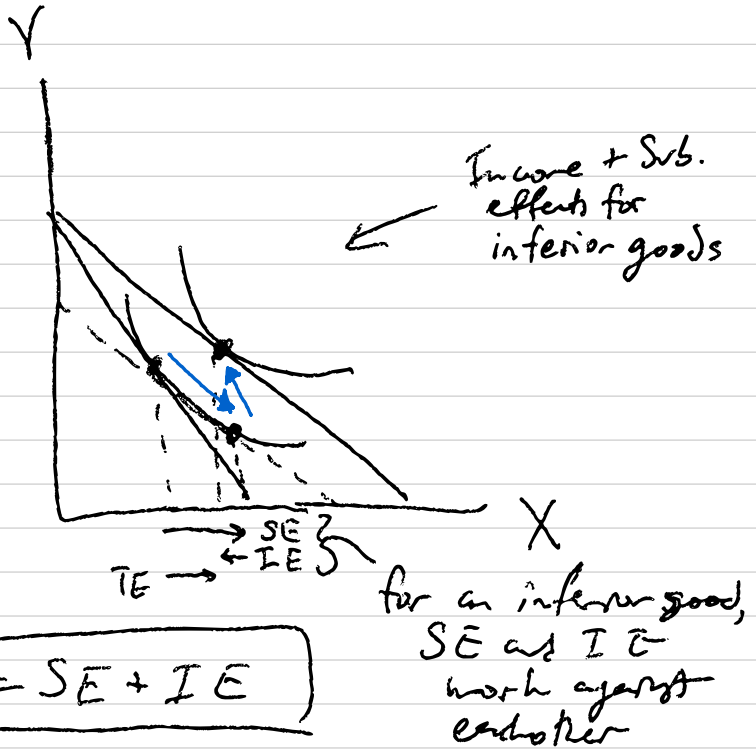
1) Substitution Effect

- buy more of a good that has become relatively cheaper, holding utility constant
(same indifference curve)

2) Income Effect

- increase in real purchasing power
- holds relative prices constant





$$TE = SE + IE$$