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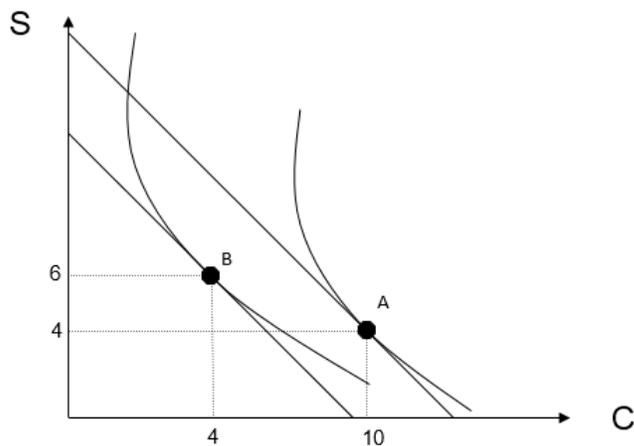
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1 Review

- Consumer Theory
 - Individuals have to make decisions on how much they want to consume.
 - How can they decide? They have to think in their preferences and then in the market
- Preferences: A Utility model
 - The main idea is that consumption generates satisfaction to consumers (i.e. utility)
 - Is this utility measurable? No in fact it is subjective to each individual in each period of time
 - Therefore we say that utility is ordinal, it represents an order! and not a magnitude
 - Think of this order as when you are comparing two goods, do I like movies more than board game?, do I like movies less than board games? or I am indifferent?
 - Indifference is very important, we can represent along a curve all combinations that make consumers indifferent.
 - The individual substitutes according to the slope of the indifference curve MRS_{xy}
- Market: Budget Line
 - The individual faces income and prices, the slope of the budget line is $-\frac{p_1}{p_2}$

2 Problems: Utility and Maximization

1. On January Vincent Vega consumed 5 steaks and 1 five dollar milk shake. He argued that this combination maximizes his level of happiness. Last Month (February), Marcellus Wallace (his boss) doubled his wage. Now Vincent consumed one steak and 10 five dollar milk shakes. If we assume that the Engel curves for both goods are linear, what can you say about the slopes of them?
2. Bill can spend his money today in consumption bundles or he can save some amount of his income to consume after a year. Assume the following graph represents his decisions over the past months



- (a) If in the first month Bill decided to consume 10 consumption Bundles and save 4 dollars (point A) and on the second month when he had choose 4 consumption bundles and 6 dollars of savings (point B). Is consumption a normal or inferior good for Bill? What about savings?
 - (b) Suppose Bill's income at point A was 44 dollars, and at point B it is 22 dollars. What is the price of consumption? What is the price of saving?
 - (c) What is the marginal rate of substitution at point A?
 - (d) Derive the Engel Curve equation for savings. Assume it is linear.
 - (e) If we assume that the demand is linear, is it possible to find the demand equation for consumption with the given information? Explain.
3. Mr. White consumes classic rock records and Zero Vanilla Coke. Mr. White has 1000 of dollars of income. Assume the price of Zero Vanilla Coke is one.
 - (a) Draw a possible representation of the utility maximization problem. Put Zero Vanilla Coke on the x axis.
 - (b) At the optimal point, we know that his marginal rate of substitution is $4y/3x$, where x is Zero Vanilla Coke and y is classic rock records. Derive the demand equation for classic rock records as a function of their price, P_y .
 4. Jackie is concerned about her sister behavior. Her sister consumed 5 units of carrots and 20 units of peaches when the prices were $P_c=10$ and $P_p=20$. At that points, Jackie knows that her sister marginal utility of carrots is 3, and for peaches is 6.
 - (a) Is Jackie right believing her sister is acting strangely?
 - (b) When the price of carrots increased to 20, her sister consumed more carrots and less peaches. Could this decision be optimal?
 - (c) Jackie decides to donate some money to her sister, after doing so she consumed fewer peaches. IS this possible within the utility maximizing framework?