



Semester: 1/2011

EE 311 Microeconomic Theory

Exercise 2: Consumer Behavior for quiz on Monday September 5, 2011 at 9:35-9:55 a.m.

1. “Since 1980, real income has increased tremendously, yet the average number of children per family has decreased.” Consider the following possible explanations, and illustrate in terms of budget constraints and indifference curves of families between number of children and “all other goods,” if the explanation is true.
 - (a) Children are an inferior good; since we are richer now, we want fewer of them.
 - (b) Children are not an inferior good; however, it has become more expensive to bear and raise children.
 - (c) Children are not an inferior good, nor have they become relatively more expensive. What has happened is that tastes have changed; couples today want smaller families than couples did in 1980.

2. The utility that Mr. Micro receives by consuming food F and clothing C is given by $U(F,C) = FC$.
 - (a) Draw the indifference curve associated with a utility level of 12, and the indifference curve associated with a utility level of 24.
 - (b) Suppose that food costs ฿1 unit, clothing costs ฿3 a unit, and Mr. Micro has ฿12 to spend on food and clothing. Graph the budget line that he faces.
 - (c) What is the utility-maximizing choice of food and clothing?
 - (d) What is the marginal rate of substitution of food for clothing when utility is maximized?
 - (e) Suppose that Mr. Micro buys 3 units of food and 3 units of clothing with his ฿12 budget. What is the marginal rate of substitution of food for clothing? Is it equal to the price ratio? Explain.

Note: Let the x-axis represent the amount of food and the Y-axis the amount of clothing.

3. What happens to the Engel curve of good X when the price of X goes up, if
 - (a) X is a non-Giffen good
 - (b) X is a Giffen good

 4. Draw compensated and ordinary demand (for X) curves when there is a fall in the price of X .

Given: X is an inferior good and
 Y is a normal good.
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