Answer on Question #44026 – Economics - Microeconomics

1. Explain or define Diminishing marginal rate of substitution?
2. Explain or define Income and substitution effects of a change in the price of a product?

Solution

1. The marginal rate of substitution is the rate at which a consumer is ready to give up one good in exchange for another good while maintaining the same level of utility. At consumption levels, our marginal rates of substitution are identical. As one moves down a (standardly convex) indifference curve, the marginal rate of substitution decreases (as measured by the absolute value of the slope of the indifference curve, which decreases). This is known as the **law of diminishing marginal rate of substitution**.

2. The **substitution effect** is the change in consumption patterns due to a change in the relative prices of goods. For example, if private universities increase their tuition by 10% and public universities increase their tuition by only 2%, then it is very likely that we would see a shift in attendance from private to public universities (at least amongst students accepted to both). The same can be said across brands, goods, and even categories of goods. Examples would be the relative price of Pepsi vs. Coke, Red Meat vs. Poultry and Clothes vs. Entertainment.

The **income effect** is the change in consumption patterns due to the change in purchasing power. This can occur from income increases, price changes, or even currency fluctuations. Since income is not a good in and of itself (it can only be exchanged for goods and services, a point which has been debated recently by neuroeconomists), price decreases increase one's purchasing power. For example, a decrease in the price of all cars allows you to buy either a cheaper car or a better car for the same price, thus increasing your utility. Goods typically fall into one of two categories: normal and inferior. These categorizations relate consumption of a good with a particular individual's income. Normal goods increase in consumption as income increase while inferior goods decrease as income increases. Some goods also can be normal or inferior only on certain ranges of an income spectrum. For example, education is a normal good: as one's income increases (family income), demand for education increases. As one's income increases, hot dog consumption, however, typically decreases.