

1. What is positive economic analysis?

Positive economics is about describing, explaining, or predicting economic events. For instance, if a quota restricts imports of sugar, the price of sugar will increase, and people will buy less sugar. That's true whether or not we think that sugar is good for people.

Positive economic analysis deals with actual or realistic situations. It expresses what is.

2. Explain Normative economic analysis with an example.

Normative economics is about making recommendations on what economic policy should be. Is a sugar quota a good policy? That depends on what we think is good and who we think counts most when we measure benefits and costs.

Normative economic analysis deals with idealistic situations. It expresses what should be.

3. Give five examples of macroeconomic studies.

- a. Inflation, disinflation, stagflation, etc.
- b. Economics growth of countries
- c. Rising youth unemployment in Italy
- d. Measuring GDP, unemployment, inflation
- e. Fiscal policies

Question 1. The supply curve of wheat in 1981 in the U.S. was $Q_S = 1800 + 240P$, and the demand curve was $Q_D = 3550 - 266P$. P and Q represent price and quantity respectively.

- (a) Find the market equilibrium of wheat, i.e., the market-clearing price and quantity of wheat.
- (b) Find the price elasticity of demand at equilibrium.

Question 2. Automobile is a durable good.

- (a) Relative to its demand curve in the long run, does its demand curve in the short run have a higher or lower slope?
- (b) Explain your answer in part (a) in terms of price elasticities of demand, in short and long runs.
- (c) Do you think that the automobile industry can be classified as a cyclical industry?

Question 3.

- (a) With changes in the price of Coca-Cola drink, there will be changes in its quantity demanded. Does this mean that the demand curve will shift (either to right or to the left)?
- (b) All consumers of Coca-Cola drink have had an increase in their salaries recently. What effect do you expect this will produce on the demand curve?
- (c) What other factors, apart from income/salary, do you think can produce similar effects in the demand curve as seen in part (b) above?

Question 4.

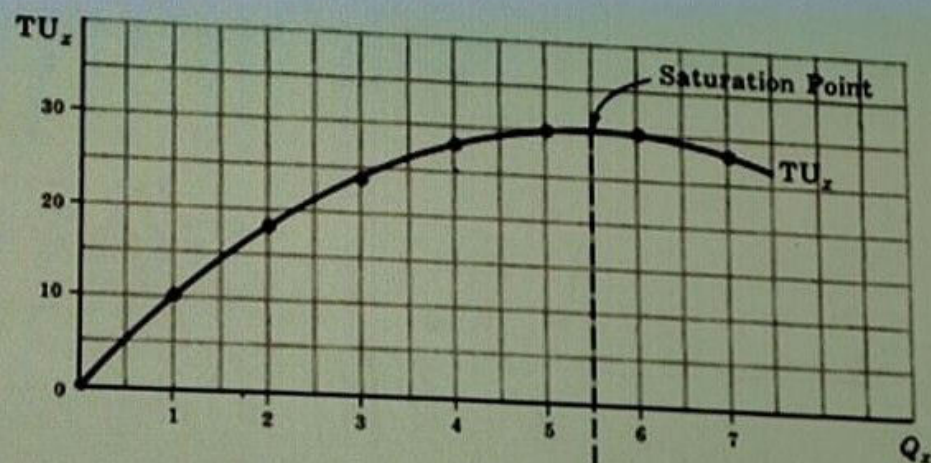
As the price of a commodity falls, what happens to consumers' total expenditure on the commodity if

- (a) the demand curve has elasticity greater than 1,
- (b) the demand curve has elasticity equal to 1, and
- (c) the demand curve has elasticity less than 1

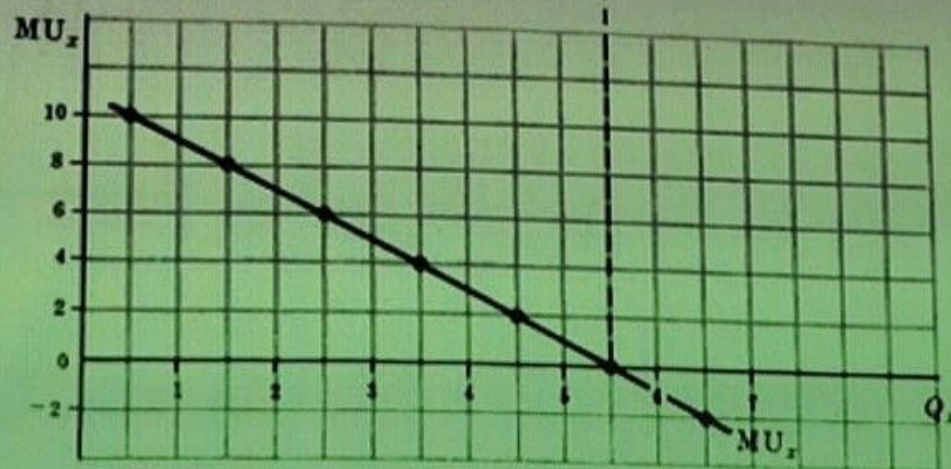
1. Explain budget line using a diagram. (Use two commodities X and Y to illustrate.)

Illustrate various baskets (or combinations) of commodities that can be purchased.

The total utility and marginal utility curves are shown in the figure below, under the principle of diminishing marginal utility. (The falling MU_x curve illustrates diminishing marginal utility.) Since marginal utility is defined as the change in total utility in changing consumption by one unit, each value of the MU_x has been recorded midway between the two levels of consumption, in part (b) of the figure. The saturation point ($MU_x = 0$) is reached when the individual increases consumption of X from 5 to 6 units.



(a)

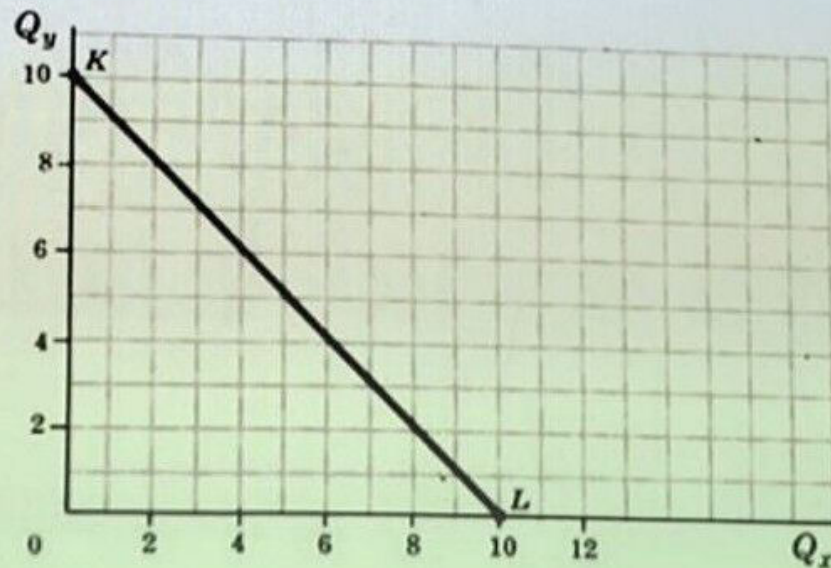


(b)

Suppose that $P_x = P_y = \$1$, that a consumer's income is \$10 per time period, and that it is all spent on X and Y. The budget line for this consumer is then given by line KL in the figure. The budget line shows all the different combinations of the two commodities that a consumer can purchase, given his or her money income and the prices of the two commodities.

If the consumer spent all of her income on commodity Y, she could purchase 10 units of Y. This defines point K. If she spent all of her income on commodity X, she could purchase 10 units of X. This defines point L.

By joining point K to point L by a straight line we define budget line KL. Budget line KL shows all the different combinations of X and Y that this individual can purchase given her money income and the prices of X and Y.



- (a) The consumer is said to be in equilibrium when he spends his income in such a way that the utility or satisfaction of the last dollar spent on the various commodities is the same. (Otherwise he could have spent the last dollar for the commodity which gives him a better utility/satisfaction.)
- (b) The following two conditions are simultaneously satisfied for consumer equilibrium:

$$(1) \quad \frac{MU_x}{P_x} = \frac{MU_y}{P_y} \quad \text{or} \quad \frac{12}{\$2} = \frac{6}{\$1}$$

$$(2) \quad P_x Q_x + P_y Q_y = M \quad \text{or} \quad (\$2)(3) + (\$1)(6) = \$12$$

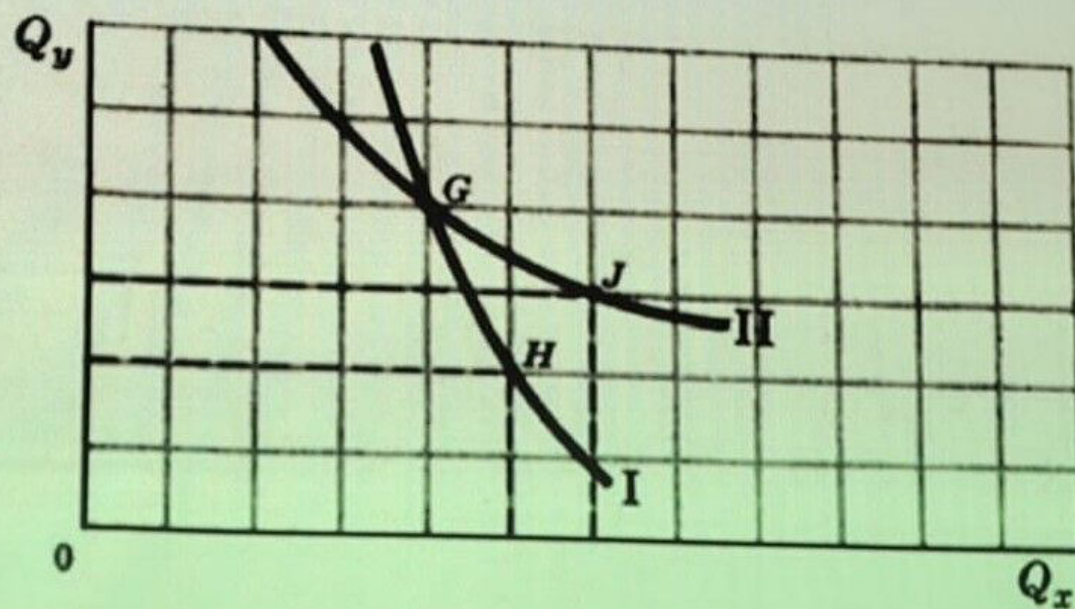
That is, the MU of the last dollar spent on X (6 utils) equals the MU of the last dollar spent on Y, and the amount of money spent on X (\$6) plus the amount of money spent on Y (\$6) exactly equals the individual's money income (of \$12).

Note:- The same two general conditions as above would have to hold for the individual to be in equilibrium if having purchased more than two commodities.

(c) The overall total utility received by the individual is 93 utils (obtained by adding the marginal utilities of the first 3 units of X and the first 6 units of Y – see the Table). This represents the maximum utility this individual can receive from all expenditures.

If the individual spent the total income in any other way, the total utility would be less when $Q_x = 3$, $Q_y = 6$.

We can prove that indifference curves cannot intersect by looking at Fig. 4-3, which assumes the contrary. G and H are two points on indifference curve I, and as such they yield equal satisfaction to the consumer. In addition, G and J are two points on indifference curve II and they also yield equal satisfaction to the consumer. It follows that H and J are points of equal satisfaction, so that, by definition, they lie on the same indifference curve (and not on two different curves as assumed). Thus, it is impossible for indifference curves to intersect.



4. Suppose that X and Y are the only two commodities available and $P_x = \$2$ while $P_y = \$1$. An individual's income is \$12 per time period and he spends the entire income to consume these commodities.

The following table gives the individual's MU_x and MU_y schedules (marginal utilities).

Q	1	2	3	4	5	6	7	8
MU_x	16	14	(12)	10	8	6	4	2
MU_y	11	10	9	8	7	(6)	5	4

- (a) When would the consumer be in equilibrium (with respect to his spending decisions)? Equilibrium represents the decision which is optimal for the consumer and he won't deviate from that decision.
- (b) Find the consumer's optimal choices of quantities for X and Y.
- (c) Find the total utility enjoyed by the consumer (in equilibrium). Could the consumer have had a utility higher than this?

2) Q) Prove that indifference curve don't intercept.

3) Q) Under the principle of diminishing marginal utility, what are the shapes of utility and marginal utility curves? Explain briefly using a diagram.

Ans 5,

Inflation refers to the general increase in the prices of goods and services over time. It leads to a decrease in the purchasing power of money, meaning that each unit of currency buys fewer goods and services than before.

Q.2 Give reasons and categorise the following into stock and flow variables?

- a) Capital
- b) Saving
- c) Profits and Losses
- d) Wealth

Challenging Question:

Consider an economy described by the Solow-Swan model, where the capital stock (K) at time t is given by $K(t) = 1000 + 50t$, where t represents time in years. If the population growth rate (n) is 2% per year and the depreciation rate (δ) of capital is 5% per year, calculate the steady-state level of capital stock.