

Microeconomics, Module 2, "Prices, Cost, and Trade"

*Illustrative Test Questions*

(The attached PDF file has better formatting.)

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Question 2.1: Absolute and Relative Prices

In an economy with only two goods, bread and wine, the absolute price of bread is \$1.50 per loaf and the absolute price of wine is \$6.00 per flask. The relative price of wine is

- A. \$4.50 per flask.
- B. \$6.00 per flask.
- C. 4 loaves of bread per flask.
- D.  $1\frac{1}{2}$  loaves of bread per flask.
- E.  $\frac{1}{4}$  loaf of bread per flask.

Answer 2.1: C

One can trade four loaves of bread for one flask of wine.

Question 2.2: Relative Prices

An economy has only two goods, bread and wine. If the price of a flask of wine is 5 loaves of bread, the price of a loaf of bread is

- A. 0.2 flasks of wine
- B.  $2\frac{1}{2}$  flasks of wine
- C. 5 flasks of wine
- D. higher if bread and wine are substitutes than if they are complements.
- E. lower if bread and wine are substitutes than if they are complements.

Answer 2.2: A

If we can trade a flask of wine for 5 loaves of bread, we can trade a loaf of bread for 0.2 flasks of wine. We deal with substitutes and complements in a later module; they are not relevant to this question.

Question 2.3: Relative Prices

An economy has only two goods, bread and wine. If the relative price of bread rises, the relative price of wine

- A. also rises.
- B. falls.
- C. is not affected.
- D. falls if bread and wine are substitutes and rises if bread and wine are complements.
- E. rises if bread and wine are substitutes and falls if bread and wine are complements.

Answer 2.3: B

If the relative price of bread rises, we must trade more flasks of wine for each loaf of bread; this implies that we must trade fewer loaves of bread for each flask of wine.

Question 2.4: Economic Terms

When Landsburg says the price of bread is \$1.50 per loaf

- A. The dollars represent a collection of goods in the economy.
- B. He assumes the price has been adjusted for inflation.
- C. He is referring to the absolute price of the commodity.
- D. He means that a consumer must spend \$1.50 to buy one loaf of bread.
- E. Dollars are a proxy for loaves of bread.

Answer 2.4: A

Dollars are a measure of value; they represent all other goods in the economy.

Question 2.5: Inflation and Relative Prices

If inflation caused the absolute prices of all goods to rise, the relative price of any good

- A. Also rises.
- B. Remains unchanged.
- C. Falls.
- D. Could rise, fall, or remain unchanged.
- E. Rises or remains unchanged, but does not fall

Answer 2.5: D

Whether the relative price rises or falls depends on the effects of inflation on all the goods in the economy. Suppose a loaf of bread costs \$2.00 and a flask of wine costs \$8.00.

- If bread rises to \$2.10 and wine rises to \$9.00, the relative price of bread falls.
- If bread rises to \$2.25 and wine rises to \$8.50, the relative price of bread rises.

Question 2.6: Inflation and Relative Prices

Suppose only bread and wine are produced in an economy, and consumers spend half their income on each. If the inflation rate is 10% and the relative price of bread rises 5%, the relative price of wine

- A. Rises 15%.
- B. Rises 10%.
- C. Rises 5%.
- D. Does not change.
- E. Falls 5%.

Answer 2.6: E

If the *relative* price of bread rises by 5%, the *relative* price of wine falls by 5%. The monetary inflation is not relevant. One can quibble about the exact amount; instead of “falls by 5%” one should say “ $1 - 1.05^{-1}$ .” Our focus in this course is the economic reasoning, not the arithmetic.

Question 2.7: Transportation Costs

Strawberries and raspberries are grown in California and shipped to Chicago. In California, strawberries cost \$2.50 a pound and raspberries cost \$1.50 a pound. Transportation costs of 50¢ a pound added to the prices in Chicago. Which city has a lower price of strawberries (relative to raspberries), and which city has a lower relative price of raspberries?

- A. The relative prices of strawberries and raspberries are lower in California, because consumers do not have to pay for transportation costs.
- B. The relative prices of strawberries and raspberries are lower in Chicago, because transportation costs lower relative prices.
- C. California has the lower relative price of raspberries, and Chicago has the lower relative price of strawberries.
- D. Chicago has the lower relative price of raspberries, and California has the lower relative price of strawberries.
- E. The relative prices are the same in California and Chicago.

Answer 2.7: C

- California: relative prices of strawberries and raspberries are \$2.50 to \$1.50 or 62.5% to 37.5%.
- Chicago: relative prices of strawberries and raspberries are \$3.00 to \$2.00 or 60% to 40%.

The relative price of strawberries is lower in Chicago (60%) and the relative price of raspberries is lower in California (37.5%).

Question 2.8: Quality

Oranges are grown in Florida and shipped to New York. Is the average quality of oranges higher in New York or Florida?

- A. In Florida, because it has the comparative advantage in orange growing.
- B. In Florida, because the costs of bringing oranges to market is lower than in New York.
- C. In New York, because it cannot produce enough oranges to meet its demand.
- D. In New York, because the price of high-quality oranges relative to low-quality oranges is lower than in Florida.
- E. The average quality of oranges is the same in the two markets.

Answer 2.8: D

Suppose that growing oranges in Florida costs 25¢ for low quality and 50¢ for high quality. Consumers are willing to pay up to twice these costs for oranges. Shipping costs to New York are 30¢ for each orange.

The cost of oranges in New York is 55¢ for low quality and 80¢ for high quality. The cost for low quality oranges is more than consumers are willing to pay, so low quality oranges will not be shipped to New York. Only high quality oranges are shipped to New York.

*Jacob:* This seems counter-intuitive. We often hear that oranges are higher quality in Florida and strawberries and raspberries are higher quality in California.

*Rachel:* Landsburg assumes that the fruit does not deteriorate *en route* to other cities. Since it takes a few days for fruit to be transported across the country, the quality is lower at the end of the journey than at the beginning.

Question 2.9: Opportunity Costs

A farmer owns land which can grow either wheat or barley. Which of the following best describes the opportunity cost of growing wheat on the land?

- A. The barley that could have been grown on the land instead of wheat.
- B. The value of the seed, fertilizer, labor, and other resources needed to grow the wheat.
- C. The deterioration in soil quality caused by growing wheat.
- D. There is no opportunity cost because the farmer owns the land.
- E. The market price of the land used to grow the wheat.

Answer 2.9: A

The cost is the value of the next best opportunity. Brealey and Myers use the same definition when calculating the net present value of a series of cash flows (corporate finance course).

Question 2.10: Economic Costs

Which of the following best describes the cost of growing wheat?

- A. The time and raw materials used to grow wheat.
- B. The alternative uses of the time and raw materials used to grow wheat.
- C. The monetary value of the time and raw materials used to grow wheat.
- D. The market price of wheat.
- E. All of the above represent different types of cost used by economists.

Answer 2.10: B

Question 2.11: Efficient Suppliers

When are you considered to be the most efficient at producing food?

- A. When your absolute cost of producing food is less than that of producing other goods.
- B. When your relative cost of producing food is less than that of producing other goods.
- C. When your absolute cost of producing food is less than others' cost of producing food.
- D. When your relative cost of producing food is less than others' cost of producing food.
- E. When the market price of the food you produce is lower than the market price of the food that others produce.

Answer 2.11: D

This question discusses relative efficiency. The cost of the resources is their alternative use. Think of the cost of producing food as the amount of clothing (or other products) that could be produced with the same time and resources. See the question below about food and clothing in Asia and America.

Question 2.12: Benefits of Trade

When do people benefit from trade?

- A. When they have different abilities.
- B. When they have different tastes.
- C. When they have different abilities or different tastes.
- D. When they have different abilities and different tastes.
- E. It is always beneficial to trade.

Answer 2.12: C

*Illustration:* Jacob excels at growing grapes and making wine; Rachel excels at baking bread. Jacob likes bread, and Rachel likes wine. Both Jacob and Rachel gain in Jacob makes wine, Rachel bakes bread, and they trade.

Table for the following illustrative test questions:

The table below shows the labor needed in Asia and America to produce food and clothing.

	<i>Asia</i>	<i>America</i>
One bushel of food	6 hours	8 hours
One suit of clothing	2 hours	4 hours

Question 2.13: Relative Costs in Asia

The cost of producing food in Asia is

- A. 6 hours of labor
- B. 3 bushels of food per suit of clothing
- C.  $\frac{1}{3}$  bushel of food per suit of clothing
- D. 3 suits of clothing per bushel of food
- E.  $\frac{1}{3}$  suit of clothing per bushel of food

Answer 2.13: D

A suit of clothing takes 2 labor hours to make; a bushel of food takes 6 labor hours to grow. A bushel of food can be traded for 3 suits of clothing.

Question 2.14: Relative Costs in America

The cost of producing clothing in America is

- A. 2 bushels of food per suit of clothing.
- B.  $\frac{1}{2}$  bushel of food per suit of clothing.
- C. 2 suits of clothing per bushel of food.
- D.  $\frac{1}{2}$  suit of clothing per bushel of food.
- E. Four hours of labor.

Answer 2.14: B

A suit of clothing takes 4 labor hours to make; a bushel of food takes 8 labor hours to grow. A bushel of food can be traded for 2 suits of clothing, so a suit of clothing can be traded for half a bushel of food.

Question 2.15: Production Efficiency

Which continent is more efficient in producing food and which continent is more efficient in producing clothing?

- A. Asia is the more efficient producer of both food and clothing.
- B. America is the more efficient producer of both food and clothing.
- C. Asia is the more efficient producer of food, and America is the more efficient producer of clothing.

- D. America is the more efficient producer of food, and Asia is the more efficient producer of clothing.
- E. Both countries are equally efficient producers of food and clothing.

Answer 2.15: D

One bushel of food is 3 suits of clothing for Asia but only 2 suits of clothing for America, so America is better at producing food and Asia is better at producing clothing.

*Jacob:* Newspapers and magazines say that America is more efficient at producing all goods than many developing countries; even the *Wall Street Journal* says this.

*Rachel:* Economists speak of relative efficiency; journalists speak of absolute efficiency.

Question 2.16: Benefits of Trade

When can trade benefit both Asia and America?

- A. When Asia specializes in food production, and America specializes in clothing.
- B. When Asia specializes in clothing production, and America specializes in food.
- C. The countries can not gain from trade, because Asia has the lower costs of production for both food and clothing.
- D. The countries can not gain from trade, because America has a comparative advantage in the production of both goods.
- E. Trade benefits both countries regardless of who produces what.

Answer 2.16: B

Asia is better at producing clothing and America is better at producing food; they can trade to get the goods that they want to consume.

*Final Exam:* Expect a question on comparative advantages on the final exam, comparing countries, states, or individuals. See also the practice problems and the homework assignments for additional examples of what you can expect on the final exam.

*Jacob:* Would economists say that trade between the U.S. and India helps both nations, even though one country has much lower wages than the other?

*Rachel:* Yes; despite the disparity between the two nations, they are relatively efficient in different products, and they both gain from trade.

*Jacob:* So why is out-sourcing such a volatile issue if everyone gains?

*Rachel:* Out-sourcing causes some temporary problems, as nations adjust. It is a volatile political issue; very few economists say that out-sourcing is bad. Those who do say it is bad are often writing politically motivated pieces to criticize business.