

Practice Assignment #1

Do not answer questions on this sheet. Staple all sheets.

I. Multiple Choice (10 points -1 point apiece) Answer the following multiple choice questions.

- 1) Scarcity exists in the short run because:
 - a. at a given point in time technological growth increases at a constant rate.
 - b. at a given point in time the quantity and quality of resources and the state of technology are fixed.
 - c. resources are usually employed inefficiently.
 - d. the world's resources are in finite supply.

- 2) If a nation is currently operating at a point on its production possibilities curve, in order to increase production of one good, the production of other goods must be:
 - a. held constant.
 - b. increased.
 - c. decreased.
 - d. none of the above.

- 3) If a nation is currently operating at a point inside its production possibilities curve, it:
 - a. has full employment.
 - b. has unemployment and/or inefficiently employed resources.
 - c. is operating at full potential.
 - d. must reduce the output of one good in order to produce more of another good.

- 4) Production efficiency is achieved:
 - a. if resources are reallocated among the production of goods and services and the output of one good can be increased without decreasing the output of other goods.
 - b. if there is no waste in the production process.
 - c. if resources are reallocated among the production of goods and services and the output of one good can be increased only by reducing the output of other goods.
 - d. at a point within the production possibilities curve.

- 5) If nation A commits a larger share of its resources to capital and technological improvements than nation B, then over time _____ will realize _____ outward shifts in its production possibilities curve.
 - a. nation B/larger.
 - b. nation A/smaller
 - c. nations A and B/ the same.
 - d. nation B/smaller.

- 6) The sacrifice or opportunity cost associated with an individual's consumption of an additional good:
 - a. is the reduction in other goods consumed when the individual does not spend all of her income.
 - b. is the increase in other goods consumed when unused income is spent.
 - c. is the reduction in other goods consumed when an individual has no additional income.
 - d. None of the above.

- 7) How is a nation's production possibilities curve affected in the long run by a boom in both new and existing housing sales in the present?
- Since housing is not productive capital, there is no impact on the nation's production possibilities curve.
 - Housing consumption increases worker productivity, causing a move up along the production possibilities curve.
 - Increased housing production in the present means fewer other goods and services, including capital, are produced. The rate of economic growth is lower than it would have been otherwise, causing the production possibilities curve to shift outward by a smaller amount.
 - The production possibilities curve will initially shift inward, but will eventually shift outward as labor productivity increases.
- 8) Which of the following statements best explains why a nation's consumption possibilities line lies outside of its production possibilities line?
- International trade requires nations to give up more than they receive, adversely affecting production and causing the production possibilities curve to shift inward away from the production possibilities curve.
 - If nations specialize in and export goods for which they have a comparative advantage and import goods for which they have a comparative disadvantage, more goods can be obtained through domestic production and trade than from domestic production alone.
 - The consumption possibilities line lies outside the production possibilities line because consumers are able to borrow and spend more than their domestically earned income.
 - In order for the consumption possibilities line to lie outside of the production possibilities line, a nation must always export more than it imports.
- 9) Which of the following best explains a linear production possibilities curve?
- Beyond some level of production, worker productivity increases at an increasing rate.
 - As more of a given class of goods is produced in a period, proportionately more of the other class of goods must be sacrificed.
 - The opportunity cost of producing a given class of goods over a period of time remains constant.
 - The opportunity cost of producing a given class of goods over a period decreases.
- 10) Suppose a nation produces two types of goods, capital and food. However, assume that in the capital goods industry firm A produces 2 units of capital per worker per week whereas firm B produces 5 units of capital per worker per week. If resources are fully employed, is this nation on its production possibilities curve?
- No, a worker can be reallocated from firm B to firm A for a net gain of 4 units of capital.
 - Yes, full employment guarantees that an economy is on its production possibilities curve.
 - Yes, full employment means full production and allocative efficiency.
 - No, a worker can be reallocated from firm B to firm A for a net gain of 3 units of capital. Thus, the economy must be inside of its production possibilities curve.

II. Analytical Problems (10 points)

- 1) (3 points) Assume that the United States contributes disproportionately more resources to the defense of Western Europe than do other NATO allies, and as a consequence these other countries can invest a larger share of their resources in capital and other goods and services. Use production possibilities curves to show both short- and long-run consequences regarding the economies of the United States and Western Europe.

2) (4 points) Answer a-g, referring to the following chart

%resources devoted to gun production	Number of guns	%resources devoted to butter production	Pounds of butter
100	50	0	0
80	40	20	5
60	30	40	10
40	20	60	15
20	10	80	20
0	0	100	25

- Plot the production possibilities curve for the production of guns and butter. Put guns on the horizontal axis.
- What is the per unit opportunity cost of increasing the production of guns from 20 to 30? From 40 to 50?
- What happens to the opportunity cost of producing guns as the production of guns increases?
- What is the per unit opportunity cost of increasing the production of butter from 10 to 15? From 20 to 30?
- What happens to the opportunity cost of producing butter as the production of butter increases?
- Given this production possibilities curve, is producing 26 guns and 13 lbs. of butter possible?
- Is producing 34 guns and 7 lbs. of butter possible? Is it efficient?

3) (3 points) Assume that France can produce wine at 25 bottles per worker and cheese at 5 pounds per worker. Assume that Italy can produce 10 bottles of wine per worker and 20 pounds of cheese per worker.

- In terms of cheese, what is the opportunity cost of producing wine in each country?
- Who has the comparative advantage in producing cheese?
- Which country should most likely specialize in cheese? in wine?