

Homework 3

1. The fundamental condition of maximum satisfaction or utility is what principle?
 - A) Marginal utility principle.
 - B) Jevons principle.
 - C) Equimarginal principle.
 - D) Samuelson principle.
 - E) none of the above.

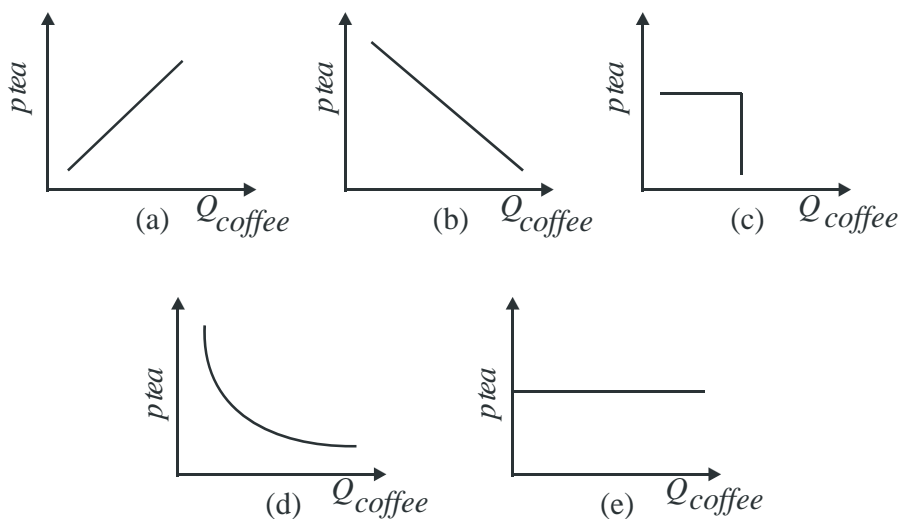
2. The rise in the price of butter will lead to:
 - A) a fall in the demand curve for butter.
 - B) a rightward shift in the demand curve for butter's substitute.
 - C) a leftward shift in the demand curve for butter's substitute.
 - D) an increase in the marginal utility of the last unit consumed of butter's substitute.
 - E) none of the above.

3. For the consumer to act rationally (i.e., achieve the greatest amount of satisfaction), he or she must:
 - A) maximize the sum of the marginal utilities of the last unit purchased of all goods in his or her budget.
 - B) equalize the marginal utilities of the last unit purchased of all commodities.
 - C) purchase no inferior goods.
 - D) equalize the marginal utilities of the last dollar spent upon each commodity or service purchased.
 - E) do none of the above.

4. The substitution effect says:
 - A) when the price of a beef increases, consumers will tend to substitute with chicken.
 - B) when the price of a beef increases, consumers will tend not to substitute.
 - C) when the price of a beef increases, consumers will tend to eat more beef.
 - D) when the price of a beef decreases, consumers will tend to substitute with chicken.
 - E) none of the above.

5. An upward shift in the supply curve of good Y, a complement of some good X, will tend to cause:
 - A) the demand curve for X to shift to the left.
 - B) the demand curve for X to shift to the right.
 - C) the price of X to increase even though the demand curve for X is unaffected.
 - D) the price of X to fall even though the demand curve for X is unaffected.
 - E) none of the above.

6. The price of good X is \$1.50 and that of good Y, \$1. A particular consumer who evaluates the marginal utility of Y to be 30 units, and is in equilibrium with respect to purchases of X and Y, must consider the marginal utility of X to be:
- 15 units.
 - 20 units.
 - 30 units.
 - 45 units.
 - none of the above.
7. If two goods, such as tea and coffee, may be considered perfect substitutes, their price-quantity relations may be depicted by which panel in the figure below?

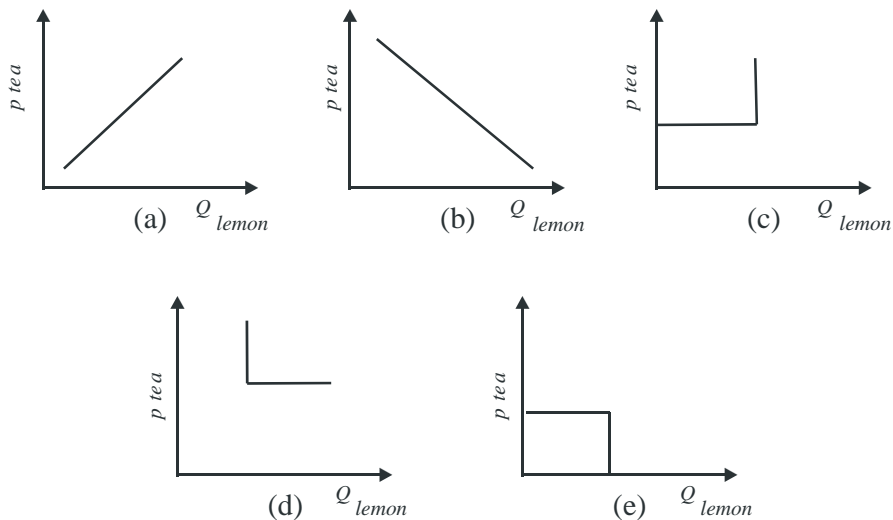


- a.
 - b.
 - c.
 - d.
 - e.
8. A consumer spends all of her income on two goods, coffee and doughnuts. She purchases coffee at 25 cents a unit with a total utility of 800 and a marginal utility of 12. Doughnuts are purchase at 75 cents a unit with a total utility of 200 and a marginal utility of 24. In order to reach consumer equilibrium, she should consume:
- less doughnuts and more coffee.
 - more doughnuts but the same amount of coffee.
 - more coffee but the same amount of doughnuts.
 - more doughnuts and less coffee.
 - the same amount of coffee and doughnuts.
9. Let there be two goods, X and Y. For individual A, the marginal utility of X is 2 while the marginal utility of Y is 1. If the prices of X and Y were both equal to \$10,

then individual A could improve his welfare even without an infusion of extra income by consuming:

- A) more X even at the expense of consuming less Y.
- B) more Y even at the expense of consuming less X.
- C) more X only if consumption of Y could be maintained at the original level.
- D) less X, but only if consumption of Y could be maintained at the original level.
- E) none of the above.

10. If two goods, such as tea and lemon, may be considered perfect complements, their price-quantity relations may be depicted by which panel of the figure below?



- A) a.
 - B) b.
 - C) c.
 - D) d.
 - E) e.
11. Suppose there are only two consumers (A & B) of good X in the economy. At a price of \$1 per unit consumer A demands 12 units and consumer B demands 24 units. The market demand for X at \$1 per unit is:
- A) 36 units.
 - B) 18 units.
 - C) 12 units.
 - D) 288 units.
 - E) cannot be determined without knowledge of each consumer's marginal utility for the good.
12. Consider an accounting firm which hires workers to enter data into a computer program. Which of the following would be considered a short run decision?
- A) The firm would like to hire ten more workers for a weekend shift.
 - B) The firm is considering an investment in additional computers.

- C) The firm would like to build its own facility.
 - D) The firm might purchase new computer software that would require some new computer hardware as well as extensive training for workers.
 - E) All of the above decisions could be made in the short run.
13. Average product of labor measures:
- A) the addition to total output when an additional worker is hired.
 - B) total product divided by total cost.
 - C) the marginal product of the last worker multiplied by the wage rate.
 - D) total product divided by the wage rate.
 - E) total product divided by the quantity of labor.
14. The "double taxation" disadvantage of incorporation refers to the:
- A) fact that a small proprietor who incorporated would, given the present tax schedules, typically find that he pays about double the tax he was paying before incorporation.
 - B) application of an excess-profits tax on corporate income, over and above the regular corporation income tax.
 - C) taxation of all corporate profits, paid first by the corporation and then by the shareholder, regardless of the amount distributed as dividends.
 - D) taxation of corporate profits, paid by the corporation, and taxation of dividends received, paid by the shareholder.
 - E) none of these.
15. A different kind of efficiency that arises when a number of different products that can be produced more efficiently together than apart:
- A) economies of scope.
 - B) economies of scale.
 - C) economies of growth.
 - D) none of the above.
16. Suppose that you have drawn a total product curve for labor given a specific technology. Now let some sort of technological change increase the productivity of labor. A new total product curve would have to be drawn:
- A) above the old with a steeper slope for any level of employment greater than zero.
 - B) above the old with a flatter slope for any level of employment greater than zero.
 - C) below the old with a steeper slope for any level of employment greater than zero.
 - D) below the old with a flatter slope for any level of employment greater than zero.
 - E) directly over the old curve signifying no change in the total product graph; only the marginal product graph would change.
17. The "double taxation" disadvantage of incorporation refers to the:
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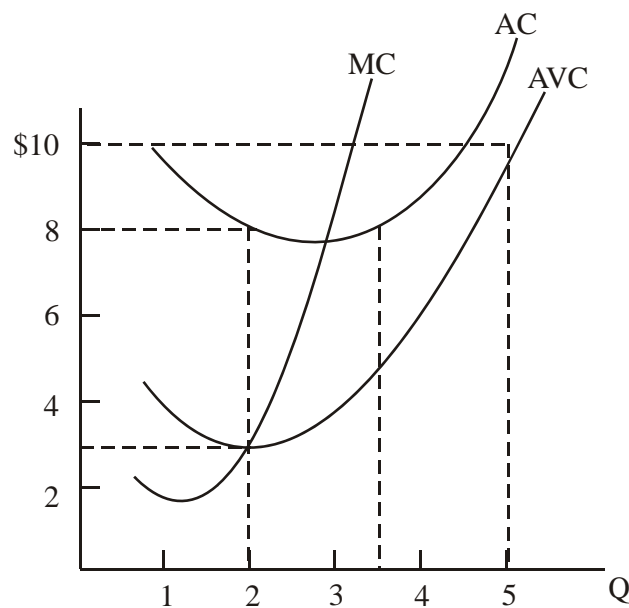
- incorporation.
- B) application of an excess-profits tax on corporate income, over and above the regular corporation income tax.
 - C) taxation of all corporate profits, paid first by the corporation and then by the shareholder, regardless of the amount distributed as dividends.
 - D) taxation of corporate profits, paid by the corporation, and taxation of dividends received, paid by the shareholder.
 - E) none of these.
18. A different kind of efficiency that arises when a number of different products that can be produced more efficiently together than apart:
- A) economies of scope.
 - B) economies of scale.
 - C) economies of growth.
 - D) none of the above.
19. Microsoft lets you have their software, Internet Explorer. By what you know about marginal cost how can they do this and stay in business?
- A) They went out of business because of this.
 - B) The marginal cost of distributing an extra unit of software is very close to zero.
 - C) The marginal cost is high but they do it anyway.
 - D) They are covering their fixed costs.
 - E) They now charge for Internet Explorer.
20. If 25 units of a good are produced at a fixed cost of \$50 and a total cost of \$550, then the average variable cost of producing the good is:
- A) \$15.
 - B) \$20.
 - C) \$25.
 - D) \$30.
 - E) none of the above.
21. If the total cost of producing 6 units is \$48 and the marginal cost of the seventh unit is \$15, then:
- A) the average total cost of 7 units is \$9.
 - B) the average variable cost of 7 units is \$9.
 - C) fixed costs are \$8.
 - D) fixed costs are \$33.
 - E) none of the above are true.
22. If it is true that handling the mail does not get cheaper as the volume of mail increases, which of the following best explains this fact?
- A) The Post Office is run by the government and therefore is inefficient.
 - B) The rule "the bigger the volume, the lower the cost" is true only if other things

remain the same; since technological knowledge changes constantly, the cost of handling mail need not fall.

- C) Although the rule "the bigger the volume, the lower the cost" is true of most industries, it is not true of all of them.
 - D) The rule "the bigger the volume, the lower the cost" is true only up to a point, beyond which costs rise.
 - E) The rule "the bigger the volume, the lower the cost" generally applies only to private industry.
23. If it costs \$30 to produce the first unit of a good and \$28, \$27, \$25, \$23, \$24, and \$25 to produce the next six units, respectively, then the minimum of the average cost curve could occur at:
- A) 1 unit.
 - B) 2 units.
 - C) 3 units.
 - D) 5 units.
 - E) none of the above.

Use the following to answer questions 24-25

Figure 7-1



24. In Figure 7-1, the minimum of the AC curve occurs:
- A) between $Q = 2$ and $Q = 3$.
 - B) between $Q = 3$ and $Q = 4$.
 - C) at $Q = 4$.
 - D) between $Q = 4$ and $Q = 5$.

E) none of the above.

25 .In Figure 7-1 what are total fixed costs at $Q = 2$?

A) 5

B) 10

C) 13.75

D) 15

E) None of the above.

Chapter 5, Questions for discussion, page 100

Q6, Q9, Q12

Chapter 6 Questions for discussion, page 124-125

Q2, Q7, Q8

Chapter 7, Questions for discussion, page 142-143

Q2, Q5