

Due 2023-04-14Producer Surplus
→ 80

一、 选择题(每题 3 分)

120

1. Jen 对她的时间的评价为每小时 60 美元。她用 2 小时为 Colleen 按摩。Colleen 愿意为按摩支付 300 美元，但他们通过谈判把价格定为 200 美元。在这个交易中，

300

Cons: 100

200

- A. 消费者剩余比生产者剩余多 20 美元
B. 消费者剩余比生产者剩余多 40 美元
C. 生产者剩余比消费者剩余多 20 美元
D. 生产者剩余比消费者剩余多 40 美元

A

1. Jen values her time at \$60 per hour. She spent 2 hours massaging Colleen. Colleen was willing to pay \$300 for the massage, but they negotiated the price down to \$200. In this transaction,

- A. Consumer surplus is \$20 more than producer surplus.
B. Consumer surplus is \$40 more than producer surplus.
C. Producer surplus is \$20 more than consumer surplus.
D. Producer surplus is \$40 more than consumer surplus.

2. 当市场均衡时，买者是支付愿望____的人，而卖者是成本____的人。

- A. 最高；最高
B. 最高；最低
C. 最低；最高
D. 最低；最低

B

2. When a market is in equilibrium, the buyers are the ones willing to pay the _____ price, while the sellers are the ones with the _____ cost.

- A. highest; highest
B. highest; lowest
C. lowest; highest
D. lowest; lowest

3. 考虑下面两个表述：

?

- I. 拉弗曲线说明，在某些情况下，政府可以对一种物品减税，并减少政府无谓损失
II. 拉弗曲线说明，在某些情况下，政府可以对一种物品减税，并增加政府税收收入

- A. 只有表述 I 正确
B. 只有表述 II 正确
C. 表述 I 和 II 都正确
D. 两个表述都不正确

3. Consider the following two statements:

- I. The Laffer curve shows that in some cases, the government can cut taxes on one good and reduce the government's unnecessary losses.
- II. The Laffer curve shows that in some cases, the government can cut taxes on one good and increase government tax revenue.

B

- A. Only statement I is correct.
- B. Only statement II is correct.
- C. Both statements I and II are correct.
- D. Neither statement is correct.



4. 考虑下面两个表述:

- I. 科斯定理并不适用于法院系统可以有效地执行所有合约的问题
- II. 科斯定理并不适用于交易成本太高使谈判变得困难

- A. 只有表述 I 正确
- B. 只有表述 II 正确
- C. 表述 I 和 II 都正确
- D. 两个表述都不正确

The court can.
but some is not the court's
problem.

4. Consider the following two statements:

- I. Coase theorem does not apply to the problem of the Court System that can effectively enforce all contracts.
- II. Coase theorem does not apply to situations where transaction costs are too high to make negotiation feasible.

B

- A. Only statement I is correct.
- B. Only statement II is correct.
- C. Both statements I and II are correct.
- D. Neither statement is correct.

5. 以下哪一种是公共物品的例子?

- A. 住房
- B. 国防
- C. 餐馆饮食
- D. 海洋中的鱼

Low exclu.
Low rival

5. Which of the following is an example of a public good?

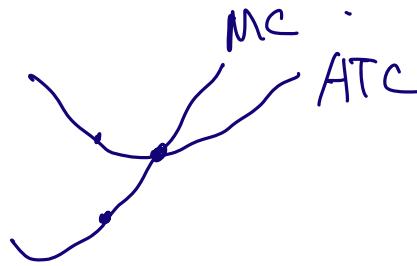
- A. Housing
- B. National defense
- C. Restaurant food and drink
- D. Fish in the ocean

B

6. 一个企业生产 20 单位产品, 平均总成本是 25 元, 边际成本是 5 元。如果将产量增加到 21 单位, 以下哪种情况一定会发生?

$$ATC' = \frac{20 \times 25 + 5}{21} < \frac{21 \times 25}{21} = 25$$

- A. 边际成本会减少
- B. 边际成本会增加
- C. 平均总成本会减少
- D. 平均总成本会增加



$$MC = ATC \text{ if } ATC'(q) = 0.$$

$$TC'(q) = ATC.$$

$$[ATC(q) \cdot q]' = ATC$$

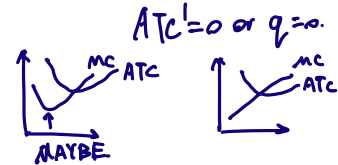
$$ATC + q \cdot ATC' = ATC$$

6. If a firm produces 20 units of output with an average total cost of 25 yuan and a marginal cost of 5 yuan, which of the following will definitely occur if it increases its output to 21 units?

- A. Marginal cost will decrease.
- B. Marginal cost will increase.
- C. Average total cost will decrease.
- D. Average total cost will increase.

$$MC < ATC \cdot ATC \downarrow$$

} 下一个产品的 marginal cost



7. 如果更高的产量水平使工人在特定工作中更专业化, 企业就会表现出规模_____和平均总成本_____

- a. 经济; 下降
- b. 经济; 上升
- c. 不经济; 下降
- d. 不经济; 上升

7. If higher output levels lead to greater specialization in specific tasks, the firm will exhibit _____ scale and _____ average total costs.

- a. increasing returns to; decreasing
- b. increasing returns to; increasing
- c. decreasing returns to; decreasing
- d. decreasing returns to; increasing

8. 在一个有许多同质企业的竞争市场长期均衡中, 价格 P、边际成本 MC 以及平均总成本 ATC 的关系是

- A. $P > MC$, 且 $P > ATC$
- B. $P > MC$, 且 $P = ATC$
- C. $P = MC$, 且 $P > ATC$
- D. $P = MC$, 且 $P = ATC$

8. In a long-run equilibrium of a competitive market with many homogeneous firms, the relationship between the price P, the marginal cost MC, and the average total cost ATC is:

- A. $P > MC$ and $P > ATC$
- B. $P > MC$ and $P = ATC$
- C. $P = MC$ and $P > ATC$
- D. $P = MC$ and $P = ATC$

9. 考虑下面两个表述:

- I. 一个完全竞争企业会把价格作为既定市场条件。
 - II. 一个完全竞争企业会选择使其获得最大市场份额的价格。 *economic agent?*
- A. 只有表述 I 正确
 - B. 只有表述 II 正确
 - C. 表述 I 和 II 都正确
 - D. 两个表述都不正确

9. Consider the following two statements:

- I. A perfectly competitive firm takes price as given.
 - II. A perfectly competitive firm chooses the price that maximizes its market share.
- A. Only statement I is correct.
 - B. Only statement II is correct.
 - C. Both statements I and II are correct.
 - D. Neither statement I nor II is correct.

A

10. 考虑下面两个表述:

- I. 一个完全竞争企业的短期供给曲线是其平均总成本曲线在其边际成本曲线之上的部分。
 - II. 一个完全竞争企业的短期供给曲线是其边际成本曲线在其平均可变成本曲线之上的部分。
- A. 只有表述 I 正确
 - B. 只有表述 II 正确
 - C. 表述 I 和 II 都正确
 - D. 两个表述都不正确

10 Consider the following two statements:

- I. The short-run supply curve of a perfectly competitive firm is the portion of its average total cost curve above its marginal cost curve.
 - II. The short-run supply curve of a perfectly competitive firm is the portion of its marginal cost curve above its average variable cost curve.
- A. Only statement I is correct.
 - B. Only statement II is correct.
 - C. Both statements I and II are correct.
 - D. Neither statement I nor II is correct.

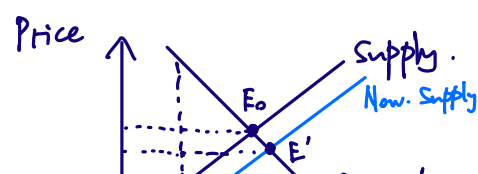
B

二、 计算题 (共 70 分, 每小问 10 分)

1. 在过去十年间, 生产平板电视的成本降低了。 我们考虑这一事实的某些含义。

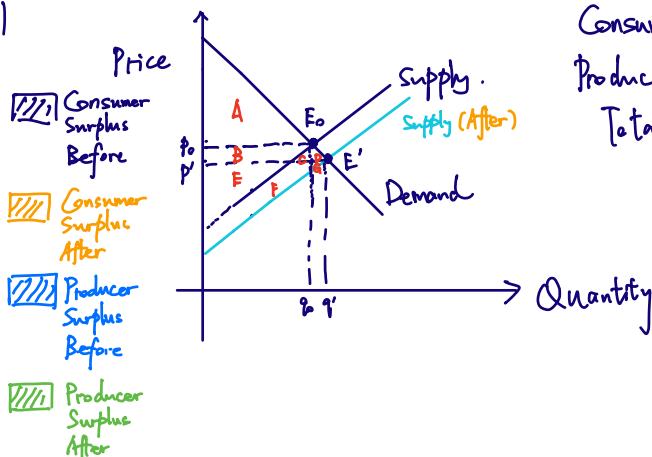
- (1). 用供求图说明生产成本下降对平板电视的价格和销售量的影响。 *Only influence supply curve.*
- (2). 用图形说明消费者剩余和生产者剩余发生了什么变化?

(1)



*The supply curve shifted right.
and the demand curve held still.
The price went down. the quantity went up.*

(2)



	Before	After	Diff
Consumer Surplus	A	A+B+C+D	B+C+D
Producer Surplus	B+E	E+F+G	F+G-B
Total Surplus	A+B+E	A+B+C+D+E+F+G	C+D+F+G

(3) Assuming that the supply of flat-screen televisions is very elastic, who benefits the most from the decrease in production cost? Is it the consumers or the producers of flat-screen televisions?

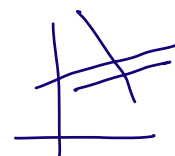
(3)

It is consumers that benefit more.

if we assume the elasticity is infinitely large, then the process of supply curve shifting downwards

will not add to producer surplus, but add to consumer surplus.

Hence the consumer will benefit more.



Price
Quantity ↑

(3). 假定平板电视的供给是非常富有弹性的。 谁从生产成本下降中获益最大？ 是平板电视的消费者还是生产者？

1. In the past decade, the production cost of flat-screen televisions has decreased. We consider some implications of this fact.

(1) Use a supply and demand graph to illustrate the impact of the decrease in production cost on the price and quantity of flat-screen televisions.

(2) Use a graph to illustrate what happens to consumer's surplus and producer's surplus.

(3) Assuming that the supply of flat-screen televisions is very elastic, who benefits the most from the decrease in production cost? Is it the consumers or the producers of flat-screen televisions?

2. 在快乐山谷有三家工业企业。 政府想把污染减少为 120 单位， 所以它给每个企业 40 单位的可交易污染许可证。

2. In Happy Valley, there are three industrial firms. The government wants to reduce pollution to 120 units, so it gives each firm 40 tradable pollution permits.

企业 Firm	最初的污染水平 / 单位 Initial Pollution Level / Units	减少一单位污染的成本 / 元 Cost of Reducing One Unit of Pollution / Yuan
A	70	20
B	80	25
C	50	10

(1). 谁出售许可证？ 出售多少？ 谁购买许可证， 购买多少？ 简单解释为什么卖者与买者愿意这样做。 在这种情况下减少污染的总成本是多少？

(2). 如果许可证不能交易， 减少污染的成本会高多少？

(1) Who sells permits? How many do they sell? Who buys permits, and how many do they buy? Explain briefly why the sellers and buyers are willing to do so. What is the total cost of pollution reduction in this case?

(2) If the permits cannot be traded, how much higher will the cost of pollution reduction be?

3. 在完全竞争行业中， 单个厂商的长期平均总成本为 $LAC=Q^2-20Q+200$ ， 市场的产品价格为 $P=600$ ， 求：

(1) 该厂商实现利润最大化时的产量、 长期平均成本、 利润；

(2) 该行业处于长期均衡时， 每个厂商的产量、 长期平均成本、 利润。

3. In a perfectly competitive industry, the long-run average total cost of a single firm is $LAC=Q^2-20Q+200$, and the market price of the product is $P=600$.

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80. 40. 0.

(1). 谁出售许可证？ 出售多少？ 谁购买许可证， 购买多少？ 简单解释为什么卖者与买者愿意这样做。 在这种情况下减少污染的总成本是多少？

(2). 如果许可证不能交易， 减少污染的成本会高多少？

(1) Since B has the highest cost of reducing pollution, B will buy 40 permits (of unit pollution) so that B can have 80 units of pollution.

Suppose A will sell x (unit) permits. then $(30+x) \cdot 20$ is A's cost of reducing pollution.

C will then sell $(40-x)$ (unit) permits with a cost of $(50-x) \cdot 10$

Total cost = $10x + 600 + 500$. when $x=0$, the total cost reaches minimum:

$\left\{ \begin{array}{l} \text{B: buy 40 permits} \\ \text{A: cost of reducing pollution: 600 yuan} \\ \text{C: sell 40 permits} \\ \text{cost of reducing pollution: 500 yuan} \end{array} \right.$

(2) If not tradable. Cost = $30 \times 20 + 40 \times 25 + 10 \times 10 = 1700$ yuan.

It's 600 yuan higher.