

2.6 Market Equilibrium and Consumer and Producer Surplus

Name: _____ Class: _____ Date: _____ **Total: 8 marks**

KEY WORDS surplus 过剩 • equilibrium 均衡 • consumer surplus 消费者剩余
• producer surplus 生产者剩余 • allocative efficiency 配置效率

Objective

Build the skills to answer exam questions on **market equilibrium and consumer and producer surplus**.

You must be able to:

- determine the **equilibrium price** and **quantity** where demand meets supply
- calculate **consumer surplus** 消费者剩余 and **producer surplus** 生产者剩余
- define **total surplus** 总剩余 and explain **allocative efficiency** 配置效率

1 Worked examples

Study these first. Each one shows the method for a question type used later.

■ Surplus areas

- **Consumer surplus** = area **below** the demand curve and **above** the price (what buyers gain).
- **Producer surplus** = area **above** the supply curve and **below** the price (what sellers gain).

■ Allocative efficiency

Total surplus (CS + PS) is greatest at the competitive equilibrium, where **marginal benefit** equals **marginal cost** — the allocatively efficient quantity.

2 Practice

2.1 Define consumer surplus. [1]

2.2 Define producer surplus. [1]

2.3 A good sells at \$10; a buyer was willing to pay \$16. Find the consumer surplus on that unit. [1]

3 Exam-style questions

3.1 Consumer surplus is the area [1]

- | | |
|---|---|
| A | B |
| C | D |
- A** above the demand curve
 - B** below demand and above the price
 - C** below the supply curve
 - D** above the price and below supply

3.2 A competitive market is allocatively efficient where [1]

- | | |
|---|---|
| A | B |
| C | D |
- A** $MB > MC$
 - B** $MB = MC$
 - C** $MB < MC$
 - D** the price is zero

3.3 In a market, the equilibrium price is \$8. On one trade, the seller would accept \$5 and the buyer would pay \$12.

- (a) Find the producer surplus on that trade. [1]
- (b) Find the consumer surplus. [1]
- (c) Find the total surplus. [1]