Exercise walk-through

Market Disequilibrium and Changes in Equilibrium ▪ 2.7

eXercise

You must be able to

- explain how a price above equilibrium creates a **surplus 过剩** and below creates a **shortage 短缺**
- predict the new equilibrium after a **shift** in demand or supply
- analyse a **simultaneous shift** and identify the **indeterminate** outcome

Method — Surplus and shortage

A price **above** equilibrium leaves a **surplus** (price falls back); a price **below** leaves a **shortage** (price rises back).

Method — Single shifts

- Demand **right** $\rightarrow$ price up, quantity up.
- Supply **right** $\rightarrow$ price down, quantity up.

Method — Simultaneous shifts

When **both** curves shift, one of price or quantity is clear and the **other is indeterminate** (depends on the relative sizes of the shifts).

Practice 2.1 ▪ 1 mark

State what happens at a price above the equilibrium price.

Solution 2.1

Method: Surplus and shortage

Worked steps

a surplus forms and the price falls back toward equilibrium **B1**.

Practice 2.2 ▪ 2 marks

State the effect of an increase in supply on equilibrium price and quantity.

Solution 2.2

Method: Single shifts

Worked steps

the price falls and the quantity rises **B1** **B1**.

Practice 2.3 ▪ 1 mark

State what makes an equilibrium outcome indeterminate.

Solution 2.3

Worked steps

when both curves shift, so the effect on one variable depends on the relative sizes of the shifts **B1**.

Exam-style 3.1 ▪ 1 mark

A price below equilibrium creates a

- **A** surplus
- **B** shortage
- **C** new equilibrium
- **D** tax

Solution 3.1

Method: Surplus and shortage

A surplus

B shortage ✓

C new equilibrium

D tax

Worked steps

B.

Exam-style 3.2 ▪ 1 mark

If demand rises and supply falls at the same time, the change in equilibrium **quantity** is

- **A** definitely up
- **B** definitely down
- **C** indeterminate
- **D** always zero

Solution 3.2

A definitely up

B definitely down

C indeterminate ✓

D always zero

Worked steps

C — price definitely rises, but quantity is indeterminate.

Exam-style 3.3 ▪ 1 mark

In a market, demand increases.

(a) State the effect on the equilibrium price.

(b) State the effect on the equilibrium quantity.

(c) If supply **also** rises at the same time, state which variable becomes indeterminate.

Solution 3.3

Method: Single shifts

Worked steps

(a) it rises **B1**. (b) it rises **B1**. (c) the price becomes indeterminate **B1**.