

Exercise walk-through

Unemployment ■ 2.3

eXercise

You must be able to

- define the **labour force** 劳动力 and calculate the **unemployment rate** 失业率
- distinguish **frictional** 摩擦性, **structural** 结构性, and **cyclical** 周期性 unemployment
- explain that the **natural rate** 自然失业率 equals frictional plus structural unemployment
- relate **full employment** to the natural rate

Method — The unemployment rate

$$\text{unemployment rate} = \frac{\text{unemployed}}{\text{labour force}} \times 100,$$

where the **labour force** = employed + unemployed (those actively seeking work).

Method — Three types

- **Frictional** — between jobs, searching.
- **Structural** — skills or location mismatch.
- **Cyclical** — caused by a recession.

Method — Natural rate

At full employment, cyclical unemployment is zero, so the **natural rate** = frictional + structural.

Practice 2.1 ■ 1 mark

Write the formula for the unemployment rate.

Solution 2.1

Worked steps

$$\text{unemployment rate} = \frac{\text{unemployed}}{\text{labour force}} \times 100 \quad \text{B1}.$$

Practice 2.2 ■ 2 marks

A country has 90 million employed and 10 million unemployed. Find the unemployment rate.

Solution 2.2

Method: The unemployment rate

Worked steps

labour force = 100 million; rate = $\frac{10}{100} \times 100 = 10\%$ **M1** **A1**.

Practice 2.3 ■ 2 marks

Name the three types of unemployment.

Solution 2.3

Method: Three types

Worked steps

frictional, structural, cyclical **B1** **B1** *for any two; for all three.*

Exam-style 3.1 ■ 1 mark

The natural rate of unemployment equals

- A** cyclical unemployment only
- B** frictional plus structural unemployment
- C** all three types added together
- D** zero

Solution 3.1

Method: Natural rate

- A cyclical unemployment only
- B frictional plus structural unemployment** 
- C all three types added together
- D zero

Worked steps

B.

Exam-style 3.2 ■ 1 mark

A worker laid off during a recession is

- A** frictionally unemployed
- B** structurally unemployed
- C** cyclically unemployed
- D** not unemployed

Solution 3.2

A frictionally unemployed

B structurally unemployed

C cyclically unemployed



D not unemployed

Worked steps

C.

Exam-style 3.3 ■ 1 mark

A country has a labour force of 50 million, of whom 46 million are employed.

- (a) Find the number unemployed.
- (b) Find the unemployment rate.

Solution 3.3

Method: The unemployment rate

Worked steps

(a) $50 - 46 = 4$ million **B1**. (b) $\frac{4}{50} \times 100 = 8\%$ **M1** **A1**.