Exercise walk-through

The Circular Flow and GDP ▪ 2.1

eXercise

You must be able to

- use the **circular flow model 循环流动模型** to trace goods, resources, and money
- define **gross domestic product (GDP) 国内生产总值**
- explain why intermediate goods, used goods, and financial transfers are excluded
- calculate GDP by the **expenditure approach**, $GDP = C + I + G + (X - M)$

Method — The circular flow

Households supply resources to firms and buy goods; firms pay wages and sell goods. Money flows one way, goods and resources the other, with government and the foreign sector added.

Method — GDP

The **market value of all final goods and services** produced **within a country** in a given period.

Method — The expenditure approach

$$GDP = C + I + G + (X - M),$$

consumption + investment + government spending + net exports. **Intermediate** goods, **used** goods, and purely **financial** transfers are excluded (to avoid double-counting).

Practice 2.1 ▪ 1 mark

Define GDP.

Solution 2.1

Worked steps

the market value of all final goods and services produced within a country in a given period **B1**.

Practice 2.2 ▪ 1 mark

Write the expenditure-approach formula for GDP.

Solution 2.2

Method: The expenditure approach

Worked steps

$GDP = C + I + G + (X - M)$ **B1**.

Practice 2.3 ▪ 2 marks

Given $C = 500$, $I = 150$, $G = 250$, $X = 80$, $M = 100$ (all in billions), find GDP.

Solution 2.3

Worked steps

$GDP = 500 + 150 + 250 + (80 - 100) = 880$ billion **M1** **A1**.

Exam-style 3.1 ▪ 1 mark

GDP measures the value of

A all goods ever produced

B final goods and services produced in a period

C intermediate goods only

D used goods

Solution 3.1

- **A** all goods ever produced
- **B** final goods and services produced in a period ✓
- **C** intermediate goods only
- **D** used goods

Worked steps

B.

Exam-style 3.2 ▪ 1 mark

Which of these is **excluded** from this year's GDP?

A a newly built car

B a haircut

C the resale of a used car

D a restaurant meal

Solution 3.2

- **A** a newly built car
- **B** a haircut
- **C** the resale of a used car ✓
- **D** a restaurant meal

Worked steps

C — a used-car resale was counted when first sold.

Exam-style 3.3 ▪ 1 mark

An economy has $C = 700$, $I = 250$, $G = 350$, exports $= 120$, imports $= 170$ (all in billions).
(a) Find net exports.
(b) Find GDP.

Solution 3.3

Worked steps

(a) $X - M = 120 - 170 = -50$ billion B1. (b) $GDP = 700 + 250 + 350 + (-50) = 1250$ billion M1 A1.