# Exercise walk-through

## Inequality ▪ 6.5

eXercise

# You must be able to

- distinguish **income inequality 收入不平等** from **wealth inequality 财富不平等**
- interpret a **Lorenz curve 洛伦兹曲线**
- calculate and interpret the **Gini coefficient 基尼系数**
- distinguish **progressive 累进**, **proportional 比例**, and **regressive 累退** tax structures

# Method — Income vs wealth

**Income** is a flow (earnings over a period); **wealth** is a stock (accumulated assets). Wealth is usually more unequal.

# Method — Lorenz curve and Gini

The **Lorenz curve** plots the cumulative share of income against the cumulative share of the population; the further it bows from the 45-degree line, the more unequal. The **Gini coefficient** ranges from $0$ (perfect equality) to $1$ (perfect inequality).

# Method — Tax structures

**Progressive** — the rate rises with income; **proportional** — a flat rate; **regressive** — the rate falls as income rises. Progressive taxes reduce inequality.

# Practice 2.1 ▪ 2 marks

State the difference between income and wealth inequality.

# Solution 2.1

**Worked steps**

income inequality is about the flow of earnings; wealth inequality is about the stock of accumulated assets **B1** **B1**.

# Practice 2.2 ▪ 1 mark

State what a Gini coefficient of $0$ means.

# Solution 2.2

Method: Lorenz curve and Gini

**Worked steps**

perfect equality (everyone has the same income) **B1**.

# Practice 2.3 ▪ 2 marks

State the difference between a progressive and a regressive tax.

# Solution 2.3

Method: Tax structures

**Worked steps**

a progressive tax takes a larger share of income as income rises; a regressive tax takes a smaller share as income rises **B1** **B1**.

# Exam-style 3.1 ▪ 1 mark

A Lorenz curve plots the distribution of

- **A** prices
- **B** income
- **C** output
- **D** interest rates

# Solution 3.1

Method: Lorenz curve and Gini

**A** prices

**B** income ✓

**C** output

**D** interest rates

**Worked steps**

**B**.

# Exam-style 3.2 ▪ 1 mark

A progressive tax takes a ________ share of income as income rises.

**A** smaller

**B** larger

**C** constant

**D** zero

# Solution 3.2

Method: Tax structures

**A** smaller

**B** larger ✓

**C** constant

**D** zero

**Worked steps**

**B**.

# Exam-style 3.3 ▪ 1 mark

A country's Gini coefficient rises from $0.30$ to $0.45$.
(a) State whether inequality rose or fell.
(b) State what a Gini of $0$ would mean.
(c) Name a tax structure that reduces inequality.

# Solution 3.3

Method: Lorenz curve and Gini

**Worked steps**

(a) it rose **B1**. (b) perfect income equality **B1**. (c) a progressive tax **B1**.