

1.2 Opportunity Cost and the Production Possibilities Curve (PPC)

Name: _____ Class: _____ Date: _____ Total: 9 marks

KEY WORDS opportunity cost 机会成本 • economic growth 经济增长
 • production possibilities curve (ppc) 生产可能性曲线 • resources 资源

Objective

Build the skills to answer exam questions on **opportunity cost and the production possibilities curve (PPC)**.

You must be able to:

- define **opportunity cost** 机会成本 as the value of the next-best alternative given up
- interpret the **production possibilities curve (PPC)** 生产可能性曲线
- link a **bowed-out** PPC to increasing opportunity cost and a straight line to constant cost
- identify efficient, inefficient, and unattainable points, and explain outward shifts

1 Worked examples

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

■ Opportunity cost

The **next-best alternative** given up when you make a choice — not the money price, but what you sacrifice.

■ The PPC

Shows the maximum combinations of two goods an economy can make. Points **on** the curve are efficient; **inside** are inefficient (wasted resources); **outside** are unattainable now.

■ Shape and shifts

A **bowed-out** PPC shows the law of **increasing** opportunity cost; a **straight** line shows constant cost. More or better resources, or new technology, shift the PPC **outward** (economic growth).

2 Practice

2.1 Define opportunity cost. [1]

2.2 State what a point **inside** the PPC represents. [1]

2.3 A country moves from producing 10 cars and 40 phones to 15 cars and 25 phones. Find the opportunity cost of the 5 extra cars. [2]

3 Exam-style questions

3.1 A bowed-out (concave) PPC shows [1]

- **A** constant opportunity cost
- **B** increasing opportunity cost
- **C** zero opportunity cost
- **D** falling total output

3.2 A point outside the PPC is currently [1]

- **A** efficient
- **B** inefficient
- **C** unattainable
- **D** optimal

3.3 An economy produces guns and butter.

- (a) State what a point **on** the PPC represents. [1]
- (b) State one cause of an **outward** shift of the PPC. [1]
- (c) It moves from 20 guns and 30 butter to 25 guns and 22 butter. Find the opportunity cost of the extra guns. [1]

Solutions

2.1 the value of the next-best alternative given up when a choice is made.

2.2 an inefficient use of resources (some are idle or wasted).

2.3 phones fall from 40 to 25, a loss of 15 phones; so the 5 cars cost 15 phones.

3.1 B.

3.2 C.

3.3 (a) an efficient, fully-employed use of all resources. (b) more/better resources or improved technology. (c) butter falls by 8, so the extra 5 guns cost 8 butter.