

# Exercise walk-through

Von Thünen Model ■ 5.8

eXercise

## You must be able to

- state the Von Thünen model's key assumption
- describe the order of the land-use rings
- explain how **transport cost** 运输成本 shapes the rings
- state one limitation of the model

## Method — The model

The **Von Thünen model** predicts farm land use around a central market. Its key driver is **transport cost**: perishable or heavy goods locate close to market, cheaper-to-move goods farther out.

## Method — The rings

From the centre outward: **market gardening/dairy** (perishable), **forest** (heavy fuel/timber, historically), **field crops/grain**, then **ranching/livestock** on the outer ring.

## Method — Limitations

It assumes a flat, uniform land with one market and no roads or rivers — real geography, refrigeration, and transport change the pattern.

## Practice 2.1 ■ 2 marks

State the main factor that determines land use in the Von Thünen model.

## Solution 2.1

Method: The model

### Worked steps

transport cost to the central market **B1**; perishability/weight of the product **B1**.

## Practice 2.2 ■ 2 marks

Explain why perishable goods like dairy locate near the market.



## Solution 2.2

Method: The model

### Worked steps

they spoil quickly and are costly to transport **B1**; being close cuts transport time/cost/spoilage **B1**.

## Practice 2.3 ■ 1 mark

A modern region uses refrigerated trucks and highways.

- (a) State one Von Thünen assumption this breaks.
- (b) Explain how it changes the ring pattern.

## Solution 2.3

### Worked steps

(a) uniform transport / no roads / perishables must be near market **B1**. (b) perishables can be grown farther out, so the neat rings break down **B1**.

## Exam-style 3.1 ■ 1 mark

In the Von Thünen model, ranching and livestock are located

**A** nearest the market

**B** in the outermost ring

**C** in the forest ring

**D** at the exact centre

## Solution 3.1

Method: The rings

**A** nearest the market

**B** in the outermost ring



**C** in the forest ring

**D** at the exact centre

### Worked steps

**B.** cheap-to-move, land-extensive ranching sits in the outer ring.

## Exam-style 3.2 ■ 1 mark

The Von Thünen model's central assumption is that transport cost rises with

- A** population
- B** distance from the market
- C** soil quality
- D** rainfall

## Solution 3.2

Method: The model

- A population
- B distance from the market** 
- C soil quality
- D rainfall

### Worked steps

- B.** transport cost increases with distance to market.

## Exam-style 3.3 ■ 1 mark

Dairy farms cluster close to a city in the model.

- (a) Explain why, using transport cost.
- (b) State one real-world factor the model ignores.



## Solution 3.3

Method: The model

### Worked steps

- (a) milk is perishable and costly to move, so it is produced near the market **B1**.
- (b) roads/rivers, refrigeration, varied terrain, or multiple markets **B1**.