

Exercise walk-through

Density and Land Use ■ 6.6

eXercise

You must be able to

- explain how **land value** 地价 falls with distance from the CBD (the bid-rent idea)
- link land value to building height and density
- define **zoning** 分区规划
- explain why residential density varies across a city

Method — Land value and the bid-rent curve

Land is most valuable at the CBD, where demand is highest, and cheaper farther out — the **bid-rent** idea. High land value pushes buildings **upward** (skyscrapers).

Method — Density patterns

Density is highest near the centre (tall apartments) and lower in outer suburbs (detached houses on larger lots).

Method — Zoning

Zoning laws set what can be built where — residential, commercial, or industrial — shaping the city's land-use pattern.

Practice 2.1 ■ 2 marks

Explain why land near the CBD is the most expensive.

Solution 2.1

Method: Land value and the bid-rent curve

Worked steps

it is the most accessible/central point **B1**; high demand drives up its value **B1**.

Practice 2.2 ■ 2 marks

Define zoning.

Solution 2.2

Worked steps

laws that divide a city into areas **B1** specifying the allowed land use (residential/commercial/industrial) **B1**.

Practice 2.3 ■ 1 mark

A city has tall apartment blocks downtown and detached houses in the suburbs.

- (a) Where is residential density higher?
- (b) Explain the link to land value.

Solution 2.3

Method: Density patterns

Worked steps

(a) downtown/near the CBD **B1**. (b) high land value forces tall, dense building to use costly land efficiently **B1**.

Exam-style 3.1 ■ 1 mark

According to the bid-rent idea, land value is highest

- A** in the outer suburbs
- B** at the central business district
- C** on farmland
- D** at a relict boundary

Solution 3.1

Method: Land value and the bid-rent curve

- A in the outer suburbs
- B at the central business district**
- C on farmland
- D at a relict boundary



Worked steps

- B.** land value peaks at the accessible CBD.

Exam-style 3.2 ■ 1 mark

Laws separating a city into residential, commercial, and industrial areas are

A zoning

B gerrymandering

C devolution

D redlining

Solution 3.2

Method: Zoning

A zoning



B gerrymandering

C devolution

D redlining

Worked steps

A. land-use separation rules = zoning.

Exam-style 3.3 ■ 1 mark

Skyscrapers cluster in the city centre.

- (a) Explain how land value causes this.
- (b) State how density changes toward the edge of the city.

Solution 3.3

Worked steps

(a) expensive central land is used intensively by building upward **B1**. (b) density falls — larger lots and lower buildings **B1**.