

Exercise walk-through

The Power of Geographic Data ■ 1.3

eXercise

You must be able to

- explain how individuals use geospatial data (navigation, choosing services)
- explain how businesses use it (siting stores, targeting markets)
- explain how governments use it (planning, policy, emergency response)
- recognise concerns such as **privacy** 隐私

Method — Individuals

People use geospatial data to navigate, find the nearest service, or check travel time — everyday decisions guided by location data.

Method — Businesses

A firm uses geospatial data to decide *where* to open a store — mapping customers, competitors, and transport to pick a profitable site.

Method — Governments

Governments use it to plan land use, route emergency services, target investment, and set policy — decisions that shape whole regions.

Practice 2.1 ■ 1 mark

Give one way an individual uses geospatial data in daily life.

Solution 2.1

Method: Businesses

Worked steps

navigation / finding the nearest shop, hospital, restaurant, etc. **B1**.

Practice 2.2 ■ 2 marks

Explain how a business could use geospatial data to choose a store location.

Solution 2.2

Worked steps

map where its customers and competitors are **B1**; pick a site near demand and transport, away from rivals **B1**.

Practice 2.3 ■ 1 mark

A city government collects location data from many sources.

- (a) State one way the government could use this data.
- (b) State one concern raised by collecting location data on people.

Solution 2.3

Method: Individuals

Worked steps

(a) plan services/transport, respond to emergencies, target investment **B1**. (b) privacy / surveillance / misuse of personal location data **B1**.

Exam-style 3.1 ■ 1 mark

A retail chain maps household incomes and traffic before opening a shop. This is

- A** environmental determinism
- B** a use of geospatial data for a business decision
- C** a map projection
- D** a formal region

Solution 3.1

- A environmental determinism
- B a use of geospatial data for a business decision** 
- C a map projection
- D a formal region

Worked steps

- B. it uses geospatial data to guide a business siting decision.

Exam-style 3.2 ■ 1 mark

A common concern about the spread of geospatial data about individuals is

A distortion of area

B loss of privacy

C map scale

D distance decay

Solution 3.2

Method: Individuals

A distortion of area

B loss of privacy 

C map scale

D distance decay

Worked steps

B. collecting personal location data raises privacy concerns.

Exam-style 3.3 ■ 1 mark

After a flood, an emergency team uses live geospatial data.

- (a) State one decision the data helps them make.
- (b) Explain why up-to-date data matters more than an old map here.

Solution 3.3

Method: Businesses

Worked steps

(a) where to send help / which routes are open / who to evacuate **B1**. (b) conditions change fast in a disaster, so current data guides safe, effective response **B1**.