AP Human Geography Practice Ladder

Use this key to check answers and read the explanations.

1. A map of fictional districts uses shading to show the share of resident workers who commute by rail. The districts have different numbers of resident workers. Which value should the map use?

A. Resident workers who commute by rail per 100 resident workers
B. The total number of rail commuters in each district
C. Kilometers of track per district
D. The total number of stations in each district

Correct answer: A. Resident workers who commute by rail per 100 resident workers
A share needs the same kind of denominator in every district. Dividing by the number of resident workers accounts for the difference in district size.

2. A fictional valley has 600 residents, 10 square kilometers of total land and 3 square kilometers of arable land. What is its physiological population density?

A. 600 residents per square kilometer of arable land
B. 60 residents per square kilometer of total land
C. 200 residents per square kilometer of arable land
D. 3 residents per square kilometer of total land

Correct answer: C. 200 residents per square kilometer of arable land
Physiological density divides the total population by the amount of arable land. The result is 600 divided by 3, or 200. Using all 10 square kilometers would give arithmetic density.

3. In a fictional region, farms near Town A cut their work shifts as City B advertises more year-round jobs. Several workers from Town A apply for jobs in City B. Which detail is a pull factor?

A. The cuts to work shifts near Town A
B. The year-round job openings in City B
C. The workers’ original location in Town A
D. The distance between Town A and City B

Correct answer: B. The year-round job openings in City B
A pull factor makes a destination more attractive. City B offers year-round work, while the cuts near Town A are a push factor.

4. A geographer walks through a fictional market district. Which observation best shows people shaping the visible cultural landscape?

A. The direction of the prevailing winds over the district
B. The district’s latitude and longitude
C. Rock layered beneath the district before it was settled
D. Bilingual shop signs and a public plaza arranged for weekly markets

Correct answer: D. Bilingual shop signs and a public plaza arranged for weekly markets
Language on signs and the way people use and organize public space are visible traces of culture. Coordinates, rocks and winds describe other aspects of the setting.

5. A fictional orchard grows apples, a factory makes applesauce and packages it in jars, and a shop sells the jars. Which activity is in the secondary sector?

A. Growing the apples
B. Making the applesauce in the factory
C. Selling the jars in the shop
D. Offering delivery as a service

Correct answer: B. Making the applesauce in the factory
The secondary sector processes raw materials into products. Growing apples is primary production, while retail and delivery provide services.

6. A fictional city records 2,800 births, 1,600 deaths, 2,400 people moving in and 3,000 moving out. With no other adjustments, what are its natural increase and total population change, in that order?

A. An increase of 1,200 and an increase of 600
B. An increase of 1,200 and an increase of 1,800
C. An increase of 600 and an increase of 1,200
D. A decrease of 600 and an increase of 600

Correct answer: A. An increase of 1,200 and an increase of 600
Births minus deaths gives a natural increase of 1,200. Moves in minus moves out gives net migration of negative 600. Together they produce population growth of 600.

7. A fictional district has 2,400 people younger than 15, 6,000 people ages 15 through 64 and 1,600 people age 65 or older. About how many people in the two outside age groups are there per 100 working-age residents?

A. 150
B. 40
C. 60
D. 67

Correct answer: D. 67
The two outside age groups total 4,000. Divide by the 6,000 working-age residents and multiply by 100 to get about 67. This compares age groups and does not measure employment.

8. Families from a fictional valley settle in a coastal city. Later they share housing leads and job information with relatives from the valley who move to the same city. Which process best fits?

A. Step migration through a series of progressively larger settlements
B. Seasonal migration between the same two places each year
C. Chain migration through a network at the destination
D. Forced migration after an involuntary removal

Correct answer: C. Chain migration through a network at the destination
Earlier migrants provide information and support that make it easier for later migrants from the same origin to reach the same destination. That pattern fits chain migration.

9. An architectural style appears in a fictional country’s largest city. Through professional networks it reaches other major cities before spreading to smaller places, even though the designers stay in their own cities. Which pattern fits best?

A. Hierarchical diffusion
B. Contagious diffusion through neighboring places first
C. Relocation diffusion caused by designers moving to new cities
D. No diffusion because the designers did not move

Correct answer: A. Hierarchical diffusion
The style spreads through levels of the city system, reaching other major centers before smaller settlements. The spread of the style does not require the designers to relocate.

10. A text map of one fictional metropolitan area shows a downtown office core, a separate industrial center near a rail junction and a second office cluster around a suburban university. Which urban model best describes this pattern?

A. The rank-size rule for a system of cities
B. The concentric-zone model
C. The sector model organized in wedges from one center
D. The multiple-nuclei model

Correct answer: D. The multiple-nuclei model
Several specialized centers shape land use in the same metropolitan area. The multiple-nuclei model describes that structure.

11. A fictional market town is surrounded by equally fertile land with the same transport routes in every direction. A grower can sell delicate greens that must arrive daily or grain that can be stored for months. Assume the crops bring comparable returns before distance-related costs. Which crop is more likely to pay for a site near the town under a simplified von Thünen model?

A. The grain, because the model places the most perishable crop farthest away.
B. The grain, because a crop can be near town only if it can be stored.
C. The delicate greens, because shorter trips reduce transport and spoilage costs.
D. Both crops must use the same location because the land is equally fertile.

Correct answer: C. The delicate greens, because shorter trips reduce transport and spoilage costs.
The model compares how returns change with distance from the market. The delicate greens benefit more from being close because travel time and spoilage cut into their returns.

12. A fictional delivery service compares two locations. Its central site costs 700 dollars per day in rent plus 2 dollars per order to deliver. Its outer site costs 380 dollars in rent plus 6 dollars per order. With 110 orders in a day, which site costs less under these assumptions?

A. The outer site by 120 dollars
B. The central site by 120 dollars
C. The central site by 320 dollars
D. The sites cost the same.

Correct answer: B. The central site by 120 dollars
At the central site the total is 700 plus 110 times 2, or 920 dollars. At the outer site it is 380 plus 110 times 6, or 1,040 dollars. The cheaper deliveries offset the higher rent at this order volume.

13. A fictional country first has 10 million residents, including 5 million in urban areas. Later it has 8 million residents, including 4.8 million in urban areas. The definition of urban stays the same. What happened to its urban share?

A. It rose from 50% to 80% because the total population fell.
B. It fell from 60% to 50% because the urban population fell.
C. It stayed at 50% because both population totals fell.
D. It rose from 50% to 60% even though the urban population fell.

Correct answer: D. It rose from 50% to 60% even though the urban population fell.
Urban share is urban population divided by total population. The share changes from 5 divided by 10 to 4.8 divided by 8, even though the number of urban residents declines.

14. In a fictional transport model, 4 tonnes of raw crop become 1 tonne of finished product. The byproducts stay at the factory. The crop source and the market are 90 kilometers apart, and shipping costs 1 dollar per tonne per kilometer. If the factory must be at one end, which location saves on shipping per batch?

A. The crop source by 270 dollars
B. The market by 270 dollars
C. The crop source by 90 dollars
D. Both locations cost the same.

Correct answer: A. The crop source by 270 dollars
A factory at the crop source ships 1 tonne to market for 90 dollars. A factory at the market ships 4 tonnes of crop for 360 dollars. Locating processing at the source avoids carrying more weight for the full distance.

15. A fictional region has two neighborhoods. In North, 900 of 1,000 households can walk to a grocery store. In South, 50 of 500 can. A regional map uses one color for the two neighborhoods combined. Which interpretation uses the regional figure and the neighborhood data correctly?

A. About 90% overall, because North is the larger neighborhood.
B. Exactly 50% overall, with equal access in the two neighborhoods.
C. About 63% overall, with much lower access in South.
D. About 63% overall, meaning each neighborhood has about 63% access.

Correct answer: C. About 63% overall, with much lower access in South.
Together, 950 of 1,500 households have access, or about 63%. The single regional value hides the local difference between North at 90% and South at 10%.