

Question 3: Two Stimuli**7 points**

A (Point 1)	Identify the scale of analysis used for Finland’s political divisions in Map 2. Acceptable identification: A1. Local scale (e.g., city, town, rural municipality) or subnational scale.	1 point
B (Point 2)	Define geometric boundaries as shown in Map 1. Examples of acceptable responses may include the following: - B1. Border lines on a map (two-dimensional plane) that are straight, angled, and/or curved to form a geometric shape (e.g., straight line, square, rectangle, circle, other polygons). - B2. A boundary or border drawn based on lines of latitude and longitude, a grid system, and/or a township and range system (baselines and meridians). - B3. Boundary lines drawn without regard to the physical or cultural landscape.	1 point
C (Point 3)	Describe one function of internal boundaries. Examples of acceptable responses may include the following: - C1. Internal boundaries define the limits of sovereignty or government control between one subnational region and another. - C2. Internal boundaries delimit or unify different types of subnational regions (e.g., voting districts, states, provinces, territories, special administrative regions, autonomous zones). - C3. Internal boundaries can unify or separate distinct ethnic, cultural, or national groups. - C4. Internal boundaries can delineate, divide, or fragment zones of public infrastructure and/or local government (e.g., water districts, school districts, voting districts). - C5. Internal boundaries can reflect, preserve, or reduce cultural, linguistic, or historical identities. - C6. Internal boundaries can prevent, resolve, or exacerbate conflicts. - C7. Internal boundaries can facilitate or hinder the collection or analysis of data. - C8. Internal boundaries can facilitate or hinder the management, protection, or distribution of natural resources or ecosystems.	1 point

D (Point 4)	Explain how the spatial organization of a country such as Canada is affected by a federal system of governance.	1 point
Examples of acceptable responses may include the following:		
• D1. Federal systems of governance affect the spatial organization of a country by creating locally based, dispersed power centers (e.g., subnational state or provincial capitals). • D2. Countries with a federal system of governance are typically organized into subnational units (e.g., autonomous regions, semiautonomous regions) and/or have regional capitals that may help reduce centrifugal forces and/or limit ethnic separatism. • D3. Federal systems tend to divide large amounts of land area into subnational divisions that may be difficult to govern from a centralized or single capital. • D4. Federal systems tend to divide multicultural countries into subnational divisions based on cultural differences (e.g., ethnic, religious, and/or linguistic diversity) that may be difficult to govern from a centralized or single capital.		
E (Point 5)	Explain how the supranational organization shown in Map 2 may limit the actions of Finland as a member state.	1 point
Examples of acceptable responses may include the following:		
• E1. The EU may enact international laws or policies that limit the economic actions of Finland or other member states (e.g., reducing or eliminating trade barriers, introducing a common currency, regulating industry). • E2. The EU may implement international laws or policies that limit the political actions of Finland or other member states (e.g., requiring common border policies, observing elections, sharing a common foreign policy). • E3. By joining the EU, Finland has agreed to allow the EU government to make laws and regulations on behalf of Finland and the other member states.		
F (Point 6)	Describe one characteristic of a cultural landscape that may reflect cultural beliefs and identities.	1 point
Examples of acceptable responses may include the following:		
• F1. Art, music, toponyms, clothing, architecture, and/or evidence of sequent occupancy may indicate elements of a culture or cultures. • F2. Religion, language, social institutions, and/or systems of governance may be based on a culture or cultures. • F3. Land use, land survey patterns, agriculture, resource use (e.g., hunting, fishing, crafts), and/or trade may indicate the practices of a culture or cultures. • F4. Foods, social interactions, holidays, and/or festivals are based on or have elements of a culture or cultures. • F5. Attitudes towards ethnicity or gender (e.g., the role of women in the workforce) may help shape the use of space in a given society.		

G (Point 7)	Explain how communication technologies may affect the cultural patterns of indigenous languages.	1 point
	Examples of acceptable responses may include the following: • G1. Communication technologies (e.g., the Internet) may encourage members of indigenous communities to adopt more commonly used languages (e.g., English), resulting in indigenous language loss. • G2. Language loss may occur due to cultural convergence, which is accelerated by the use of communication technologies. • G3. Communication technologies may increase the availability of indigenous language resources (e.g., via websites, apps, social media), resulting in language preservation. • G4. Communication technologies may be used to increase awareness of indigenous identity issues, which may result in language preservation. • G5. Limited access or cultural resistance (e.g., reliance on oral tradition) to communication technologies can restrict or prevent significant changes in the cultural patterns of indigenous languages.	

Question 3: Two Stimuli**7 points****(A) Describe ONE reason for the migration patterns shown on the map.****1 point**

Accept one of the following:

- A1. Seasonal migration (transhumance) to move herds to grazing lands and/or water sources.
- A2. Migration to areas with more rainfall during the dry season.
- A3. Migration because the region's climate (arid or semi-arid) is too dry to support grazing year-round and/or to reduce stress on land that has been grazed.
- A4. Movement southward during the dry season and/or northward during the wet season.
- A5. Migration patterns based on cultural or agricultural practices.

(B) Describe ONE cause of desertification in the Sahel region.**1 point**

Accept one of the following:

- B1. Overgrazing has removed the grass cover and/or damaged the soil.
- B2. Human population growth and the use of arid land for growing food and/or demand for water have placed the land under added stress.
- B3. Runoff, wind, and/or erosion has removed fertile topsoil.
- B4. Soil erosion caused by climate change, natural drought, increasingly dry climate and/or human activities.
- B5. The use of wood for fuel and building materials has removed natural scrub or shrub landscapes.

(C) Explain how pastoral nomadism may affect the cultural landscape of the Sahel region.**1 point**

Accept one of the following:

- C1. Pastoral nomadism affects land use patterns in the region, with much land used for grazing, leaving an imprint of agricultural patterns (e.g., migration routes, traditional sites for seasonal settlements, watering sites, market locations, corrals, animal pens) on the cultural landscape.
- C2. Pastoral nomadism contributes to specific cultural identities and/or shared practices in groups with migrant lifestyles, leaving an imprint on the landscape (e.g., types of temporary settlements, meeting places, market locations) and/or infrastructure that supports communication (e.g., signs, cell phone towers).
- C3. Pastoral nomadism affects the built environment, with many nomadic herders constructing portable and/or seasonal (temporary) dwellings.
- C4. Pastoral nomads follow long-established seasonal migration routes or seasonal temporary settlements, thus maintaining local traditions and/or agricultural practices (e.g., animal husbandry, dairying, celebrations) that leave an imprint on the cultural landscape.

(D) Explain ONE way mixed-crop farming could be affected by climatic conditions. 1 point

Accept one of the following:

- D1. The availability of annual or seasonal rainfall (e.g., drought) results in crop or animal losses.
- D2. Variables and/or extremes in annual and/or seasonal temperatures may prevent or enable the cultivation of certain plant crops or animals.
- D3. Farming is affected by floods in areas where there are seasonal monsoons, hurricanes, and/or intense storms.
- D4. Farming is affected by changes in temperature or rainfall which may cause farmers to substitute one crop for another, and/or change farming techniques.
- D5. Changes in temperature, precipitation, frequency, and/or the intensity of storms may limit plant crops or impact the overall health of animals.

(E) Using the map and table, explain why expanding protected natural areas may affect the migration routes of nomadic herders in the Sahel region. 1 point

Accept one of the following:

- E1. Nomadic herders may have to make detours to avoid crossing protected natural areas, or use corridors established by governments, thus altering their traditional migration routes.
 - E2. Newly expanded protected natural areas may disrupt established migration routes traditionally used by nomadic herders.
 - E3. Protected natural areas may bring nomadic herders into conflict with conservation organizations or forestry services as they may differ on the use of protected areas for grazing, and/or concern about the impact of herding on natural habitats.
 - E4. Nomadic herders who travel through or graze animals in protected areas may risk legal consequences (e.g., fines) and begin to avoid those routes.
 - E5. Protected areas may preserve grassland habitat and/or prevent the loss of potential grazing lands, allowing nomadic herders to continue their traditional migration routes.
 - E6. Protected areas may conserve traditional migration routes for herders under agreements with governments or conservation organizations.
 - E7. Nomadic herders who cross international borders may encounter tensions with government officials who enforce migration policies and/or inspect for contraband items.
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(F) Using the information in the table, explain why farmers' increased use of irrigation may increase conflicts with nomadic herders. 1 point

Accept one of the following:

- F1. Increased use of irrigation may increase the amount of land that can be cultivated for crops, cutting off migration routes and/or limiting the use of such lands for transporting or grazing herds during seasonal migrations.
 - F2. Increased use of irrigation may increase the amount of land that can be cultivated for crops and eliminate areas where nomadic herders could set up temporary settlements and/or corrals or pens.
 - F3. Increased use of irrigation may deplete water supplies used by nomadic herders and/or cause competition between herders and farmers to water livestock and/or crops during pasturing or seasonal migrations.
 - F4. Overuse of irrigation in dryland (arid) environments may lead to soil salinization that could reduce the amount of food for animals (forage) or land for grazing that is available for migrating herds.
 - F5. Irrigation may lead to runoff carrying chemical fertilizer or pesticides into bodies of water where herders drink and/or water their livestock, increasing tensions between nomadic herders and farmers.
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(G) Explain the degree to which increased access to communication technologies may create cultural convergence among nomadic herders. 1 point

Statement of a moderate to high degree

AND

Accept one of the following:

- G1. Increased use of mobile phones, television, and/or the internet may expose herders to cultural influences from outside of their community and make herder culture less unique and/or expose nomadic herders to the cultural or social norms of external communities.
- G2. Increased use of global communication systems may cause herders to use more widely spoken languages and make indigenous language use less common.
- G3. Increased consumption of external music, literature, art, and/or holidays may diminish the cultural interest of herders to practice or maintain indigenous traditions within herder communities.

OR

Statement of a moderate to low degree

AND

Accept one of the following:

- G4. Increased exposure to outside cultural influences (e.g., music, languages, information) may mobilize nomadic herders to unite to protect their culture, resulting in a stronger cultural identity among nomadic herders.
- G5. Limited access to communication technologies due to cost or connectivity may hinder cultural convergence.
- G6. Nomadic herder communities may reject increased access to communication technologies to resist the forces of globalization and/or maintain traditional lifestyles.

Total for question 3: 7 points