

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. 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.	1 point
E (Point 5)	Explain how the supranational organization shown in Map 2 may limit the actions of Finland as a member state. 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.	1 point
F (Point 6)	Describe one characteristic of a cultural landscape that may reflect cultural beliefs and identities. Examples of acceptable responses may include the following: - F1. Art, music, toponyms, clothing, architecture, and/or evidence of sequent occupance 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.	1 point

G (Point 7)	Explain how communication technologies may affect the cultural patterns of indigenous languages. 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.	1 point
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Question 2: One Stimulus**7 points**

(A)	Identify ONE type of boundary shown on the map. Accept one of the following: - A1. Political boundary (e.g., state, district, county) - A2. Physical or natural boundary (e.g., the Potomac River) - A3. Geometric boundary (e.g., District of Columbia, Arlington County) - A4. Relict boundary (e.g., Arlington County was once part of the District of Columbia) - A5. Superimposed boundary (e.g., District of Columbia) - A6. Consequent boundary (e.g., Potomac River between the District of Columbia and Virginia) - A7. Antecedent boundary (e.g., colonial-era boundaries) - A8. Subsequent boundary (e.g., District of Columbia carved out of already existing Maryland and/or Virginia)	1 point
(B)	Describe ONE site characteristic of Washington, D.C., shown on the map. Accept one of the following: - B1. Washington, D.C., is located along the Potomac River and/or the Anacostia River. - B2. Washington, D.C., is at the confluence or intersection of the Potomac River and the Anacostia River. - B3. Washington, D.C., is at the intersection of the coastal plain and the Piedmont (foothills) or on the fall line. - B4. Washington, D.C., is located in an area with a tidal estuary, a peninsula, freshwater streams, wetlands, fertile soils, low-lying areas, and/or tidal flats.	1 point
(C)	Explain how political power is spatially distributed within a federal system of governance. Accept one of the following: - C1. Power is dispersed or shared between the central, sub-national, and/or local governments. - C2. Most federal systems have capital districts (e.g., Washington, D.C., Brasília) or locations (e.g., courts, military bases) where some government functions are centralized and also sub-national (state, provincial, departmental) capitals where local or regional political functions are dispersed.	1 point

- (D) Explain ONE way suburban sprawl is likely to negatively affect environmental sustainability in metropolitan areas. 1 point**

Accept one of the following:

- D1. Development related to sprawl (e.g., construction, transportation, utilities) can lead to increased air or water pollution.
- D2. Land cover change related to sprawl (e.g., deforestation) can lead to the loss or fragmentation of habitats, water pollution, and/or decreased biodiversity.
- D3. Expansion of transportation networks related to sprawl can lead to more pollution and/or warmer climates (e.g., traffic, congestion, urban heat islands, inefficient energy use).
- D4. Development related to sprawl can inhibit the use of land for local food production, open space, conservation, greenbelts, or preservation efforts.

- (E) Describe ONE way transportation-oriented development, such as expanding a Metrorail line, may promote urban sustainability. 1 point**

Accept one of the following:

- E1. By promoting walkability, livability, more efficient land use (e.g., fewer roadways, reduction in impermeable surfaces), and/or reductions in pollution.
- E2. By reducing the number of cars, resulting in decreased air and/or noise pollution.
- E3. By reducing the ecological footprint (e.g., reduced carbon footprint, reduced energy use) of the city.
- E4. Heavily trafficked and/or accessible transit stops may become places of mixed-use development.
- E5. Additional transit stops can reduce commuting distances or travel times to work and/or to other service locations.
- E6. Commuting can be more economically sustainable than car travel (e.g., cost of car ownership, fuel, maintenance, insurance, parking).

- (F) Explain how regional transportation networks led to the development of edge cities. 1 point**

Accept one of the following:

- F1. Transportation enabled commercial land use to decentralize (move away) from city centers.
- F2. Edge cities formed near major highway intersections or transit stations because those developments needed to be accessible to workers and/or consumers.
- F3. By providing access to services or office locations for the people who live, work, and/or shop there.
- F4. Transportation provides access to lower-cost land away from the city center (bid rent theory).

- (G) Explain how the geographic fragmentation of local governments could present a challenge to the Washington, D.C., metropolitan area's ability to construct a new Metrorail line. 1 point**

Accept one of the following:

- G1. Construction could be challenging because it would involve multiple governments to fund, plan, zone, and/or cooperate.
- G2. Local governments could disagree with the federal government about where to construct a new Metro line.
- G3. Construction could be challenging because parts of the new Metro line might not fall clearly under the jurisdiction of a specific government.
- G4. Having many competing ideas or authorities could make the planning process inefficient and/or make it difficult to determine accountability.
- G5. Local governments could disagree on how to share the costs of construction and/or operational costs of the rail system.
- G6. Local governments could disagree on the location of new stations because development around new Metro stations is a source of tax revenue and/or economic development.

Total for question 2: 7 points

Question 1: No Stimulus**7 points****(A) Define the concept of RNI.****1 point**

Accept one of the following:

- A1. The difference between the crude birth rate and crude death rate.
- A2. The difference between the crude birth rate and crude death rate, expressed as a percentage or as thousands per population.
- A3. The number of live births and the number of deaths divided by the population per thousand population.
- A4. The difference between the crude birth rate and crude death rate over a particular time period (e.g., a year).
- A5. The annual percent change in population, not including immigration or emigration.

(B) Describe how a country may have a negative RNI.**1 point**

Accept one of the following:

- B1. A country can have a negative RNI if the death rate is higher than the birth rate in a given year.
- B2. A country can have a negative RNI if the number of deaths exceeds the number of live births in a given year.

(C) Compare ONE difference between RNI and the total fertility rate as indicators of population change.**1 point**

Accept one of the following:

- C1. RNI is the annual percent growth rate of a population (not including immigration or emigration), while the total fertility rate (TFR) estimates the number of children that may be born to women of birthing age or aged 15–45.
- C2. RNI includes both crude birth and death rates, while TFR is a measurement of the number of children likely to be born to a woman and does not involve any mortality measures.
- C3. RNI is an annual statistic for a specific year, while the TFR is an estimate at a specific point in time (e.g., snapshot).
- C4. An RNI of 0.0 is a zero-growth population, while a TFR of 2.1 is a population that is replacing itself but will not grow in numbers over time.
- C5. RNI can predict future population growth based upon the demographic transition, while TFR can predict future population growth by comparison to the replacement rate (TFR=2.1).

(D) Explain ONE reason why RNI in urban areas may vary significantly from RNI in rural areas in the same country.**1 point**

Accept one of the following:

- D1. Urban populations tend to have fewer children than rural populations due to the reduced need for agricultural labor.
- D2. The cost of living in urban areas (e.g., housing, schools) tends to be higher than in rural areas, and this may incentivize women to have fewer children leading to a lower RNI.
- D3. Women in urban areas tend to have greater access to health care, health education, and/or family planning resources, which reduces the probability of having or the propensity to have children (fecundity).
- D4. Women in urban communities commonly work outside of the home, having less time to care for children.
- D5. Families in urban housing tend to have less space to house children.
- D6. Women in urban areas tend to have higher levels of education, which reduces the probability of having children, the propensity to have children (fecundity), and/or delays the age at which women have children.
- D7. Women in urban areas tend to have more political power, which reduces the probability of having children, the propensity to have children (fecundity), or delays the age at which women have children.
- D8. Women in urban areas tend to have greater financial stability, which reduces the probability of having children, the propensity to have children (fecundity), or delays the age at which women have children.
- D9. The higher level of access to health care in cities reduces infant and/or child mortality rates, which reduces the need for families to have additional children.
- D10. People in rural areas may lack access to or may not be able to afford contraception and family planning due to increased levels of poverty, or lack of health services.
- D11. People in rural areas may hold on to traditional cultural values that do not support limiting birth rates, resulting in higher rates of natural increase in rural areas.
- D12. People in rural areas may need more children to work or help with labor-intensive agricultural work, resulting in higher rates of natural increase in rural areas.
- D13. Women in rural areas may lack access to or may not be able to afford education, limiting opportunities outside the home, and resulting in higher rates of natural increase.
- D14. Women in rural areas may have less access to health care which may increase infant mortality rates and/or child mortality rates, and/or increase the need or desire for families to have additional children.

- (E) Explain why there are often differences in doubling times between less developed countries and more developed countries. 1 point

Accept one of the following:

- E1. Doubling times may vary because less developed countries (LDCs) have higher rates of natural increase than more developed countries (MDCs).
- E2. Doubling times may vary because MDCs have lower rates of natural increase than LDCs.
- E3. LDCs have social or economic conditions that may result in high population growth rates or high fertility rates (e.g., domestic role of women in society, low age of marriage, highly agricultural society, high levels of religious adherence, and/or high infant mortality rates, low availability of healthcare and/or family planning) that reduce the amount of time needed for a population to double in size, as compared to many MDCs, which do not have these social or economic conditions.
- E4. MDCs have social and economic conditions that can result in low population growth rates and/or low fertility rates (e.g., equitable roles of women in society, marriage at a later age, service and technology-based economy, highly urbanized society, low levels of religious adherence, and/or low infant mortality rates, high accessibility to healthcare and/or family planning) that increase the amount of time needed for a population to double in size, as compared to many LDCs where these social and economic conditions do not exist.
- E5. MDCs tend to have lower birth rates or lower total fertility rates than LDCs, which, combined with low death rates and/or a lower RNI, result in a longer doubling time in MDCs.
- E6. LDCs tend to have higher RNIs than MDCs, resulting in a shorter doubling time in LDCs.
- E7. LDCs tend to have higher birth rates or higher fertility rates than MDCs, which, combined with lower death rates and/or a higher RNI, result in a shorter doubling time in LDCs.
- E8. MDCs tend to have lower RNI than LDCs, resulting in a longer doubling time in MDCs.

- (F) Explain ONE reason ethnonationalism might lead a government to promote pronatalist policies. 1 point

Accept one of the following:

- F1. A government might promote pronatalist policies because children can be seen as a symbol of national pride and/or a centripetal force (cultural cohesion).
- F2. A government might promote pronatalist policies because increases in population of a national, ethnic, culture group, or nation-state can improve social cohesion or social relations.
- F3. A government might promote pronatalist policies because increased birth rates can bolster the desire for territorial expansion, economic growth, irredentism, or militancy (e.g., increased size of the military, social status gained through military service).
- F4. The government of a theocratic state might promote pronatalist policies based on religious doctrine.
- F5. Some governments may promote pronatalist policies aimed at the majority (e.g., dominant) culture (e.g., ethnic) group to increase the political power of the majority and/or decrease the power of minority groups.
- F6. A government with restrictive immigration laws or policies may promote pronatalist policies to reverse a declining total population.

- (G) Explain the degree to which a unitary government may be more effective than a federal government in enforcing antinatalist policies. 1 point**

Accept one of the following:

Statement or indication of a moderate or high degree

AND

- G1. A unitary government could more easily enact countrywide family planning policies or laws that restrict reproduction (e.g., high penalties, criminalization, financial disincentives, use of informants and/or secret police to identify violators).
- G2. A unitary government may have an effective, specialized, and/or centralized national public health care system and/or national health insurance system (e.g., provide family planning services more effectively and/or at lower cost).
- G3. A unitary government may have a more efficient system to deliver incentives directly to participating citizens (e.g., have fewer levels of governance where money could be siphoned off for other public programs or be stolen through corruption).
- G4. A federal government may have regional variations in law or policy that could result in less effective programs in some areas (e.g., variations in the delivery of healthcare, access to family planning services, the enforcement of federal policies to control population or reduce fertility rates).

OR

Statement or indication of a low or moderate degree

AND

- G5. There may be little to no difference between the effectiveness of unitary governments and federal governments to deliver an antinatalist policy if there is an inadequate, inaccessible, and/or unaffordable healthcare system (e.g., developing effective family planning programs or policies, access to family planning services).
- G6. There may be little to no difference between the effectiveness of unitary governments and federal governments to deliver an antinatalist policy if there is an adequate, accessible, and/or affordable healthcare system.
- G7. There may be little to no difference between the effectiveness of unitary governments and federal governments to deliver an antinatalist policy if the government lacks enforcement capabilities or lacks the ability to fund and/or deliver incentives to participating citizens.

Total for question 1: 7 points

Question 1: No Stimulus

7 points

- (A) Define the concept of territoriality in terms of political geography. 1 point**

Accept one of the following:

- A1. Territoriality is the connection of people, their culture, and their economic systems to where they live (can apply to multiple scales).
- A2. Territoriality is the process by which a set of political units with fixed distinct boundaries are created, expanded, annexed, and/or defended.
- A3. Territoriality is the process by which a land area (or land and water) is established under a jurisdiction (e.g., an established or recognized system of governance, or administrative control).

- (B) Describe the concept of sovereignty as it relates to the state. 1 point**

Accept one of the following:

- B1. Sovereign states have the right to control what is inside their borders without interference from outside states and entities.
- B2. Sovereign states are recognized by the international community and other foreign entities.
- B3. Sovereign states have the right to defend their borders against invasion by other states.
- B4. Sovereign states have the right to close the borders to immigration.
- B5. Sovereign states have the right to regulate international trade.
- B6. Sovereign states have the right to establish their own government by establishing a constitution and/or system of political representation.
- B7. Sovereign states have the right to enact laws or policies (e.g., the criminal justice code, civil legal code, land ownership system, and/or natural resource management system).
- B8. Sovereign states have the right to establish alliances and recognize foreign states or entities, and/or establish diplomatic relations and embassies in other countries.
- B9. Sovereign states have the right to establish policies (e.g., taxation, appropriations).

- (C) Compare ONE difference in territorial organization between the governments of unitary states and the governments of federal states. 1 point

Accept one of the following:

- C1. Unitary states tend to have a more top-down form of governance, while federal states have more locally based power centers.
- C2. Unitary states have a single government that expresses power over the entire territory, whereas federal states divide power among regional governments that control a limited portion of territory.
- C3. Unitary states have a centralized system of administration (e.g., law enforcement, natural resource management, infrastructure development), whereas federal states have more dispersed power centers.
- C4. Unitary states tend to have a single system of territorial control, whereas federal states may have multiple types of internal territorial systems based upon each region's culture (e.g., different land survey systems, differing legal systems, different ethnicities).

- (D) Recently, the United Kingdom decided to withdraw from the European Union. Explain ONE possible reason why sovereignty would play a role in the United Kingdom's decision to withdraw from the European Union. 1 point

Accept one of the following:

- D1. The United Kingdom (UK) left the European Union (EU) because its leaders believed the UK had surrendered too much sovereignty to the supranational government of the EU.
- D2. The free movement of people among the EU member states had increased immigration to the UK resulting in political pressure to limit immigration to the UK, in opposition to existing EU policies.
- D3. The leaders of the UK believed they could form more advantageous trade agreements by working independently from the EU.
- D4. The UK participated in the EU economic policies but never joined the eurozone, maintaining its own currency, the British pound, as a symbol of British identity, and/or source of economic stability or superiority in value as compared to the euro.
- D5. The UK is physically separated from Europe, with a long history of world trade and a strong sense of itself as a world power, and this translated into a weaker sense of being part of/belonging to the EU.

- (E) During the United Kingdom's withdrawal from the European Union, some people in Scotland proposed independence from the United Kingdom. Explain ONE possible reason why territoriality would play a role in the devolution of a state. 1 point

Accept one of the following:

- E1. People in one region within a state have a connection to the land of the ethnic group, culture, and/or regional identity and believe that they should have autonomy over the region or the right to secede from the state.
- E2. People in one region within a state believe that the leaders in the government or people in other parts of the country (e.g., core or capital) do not respect the people of the region's long history of culture and attachment to the land.
- E3. People in one region within a state believe that the economic policies of the state favor a majority group or another group in power at the expense of their region.
- E4. Many Scots believe that Scotland should have control of foreign policy and defense agreements.
- E5. Many Scots believe that Scotland is both its own country and a part of Europe (or the European Union) at the same time.
- E6. Many Scots believe that trade agreements among EU members will be better for the economy of Scotland if it rejoins the EU.
- E7. Many political leaders desire Scottish independence so that Scotland may have an economy and/or monetary system separate from the rest of the UK.
- E8. Some in Scotland desire an independent state (separate from England, Wales, and Northern Ireland) that still has the British monarch as the titular head of state.

- (F) **Local governments often divide cities into representative electoral districts. Explain how the process of redrawing district boundary lines may affect election results within a city.** 1 point

Accept one of the following:

- F1. Redrawing district boundaries may shift the balance of political power among or favor certain political parties, candidates, and/or representative groups (intentionally or unintentionally).
- F2. If the boundaries are drawn in a manner that divides a voting group among several districts, the power of the group is diminished (cracking to decrease power).
- F3. If the boundaries are drawn such that a voting group is concentrated in one district, its political power is increased (packing to increase power) or favors a group that has a higher voter turnout (stacking to increase power).
- F4. If the boundaries are drawn in such a way that a voting group is so overwhelmingly concentrated in one district, then the group may lose the ability to influence power in any surrounding area (packing to decrease power).
- F5. Districts are often redrawn as population changes over time and new lines may create new districts that are different than before, which may mean voters recently added to these districts may be less familiar with issues and candidates in these districts.

- (G) **Explain why neighboring local governments may face challenges in providing transportation services to residents of a rapidly growing metropolitan area.** 1 point

Accept one of the following:

- G1. Local governments that are fragmented, divided, and/or dispersed may find it difficult to agree on transportation services and/or projects.
- G2. Local governments may be completely independent of each other and may not have an official regional or metropolitan forum or interface in which to interact and/or plan for transportation needs.
- G3. Local governments may compete for transportation funding resources from state, province, national, federal, or supranational government sources and may see neighboring governments as opponents and/or competitors for resources.
- G4. Local competitiveness (e.g., local pride, rivalries, or racial, ethnic, and/or economic differences) between neighboring communities may hinder effective cooperation between local governments on transportation planning.
- G5. Disparities in wealth between neighboring local governments dealing with a high volume of commuters coming from other local governments may not have the resources needed to meet the demand for transit infrastructure and/or services.
- G6. Suburban sprawl and the establishment of separate municipalities on the edge of the metropolitan area may increase demand, pressure, and/or traffic flow through communities closer to the city center and/or along major transit corridors.

Total for question 1: 7 points