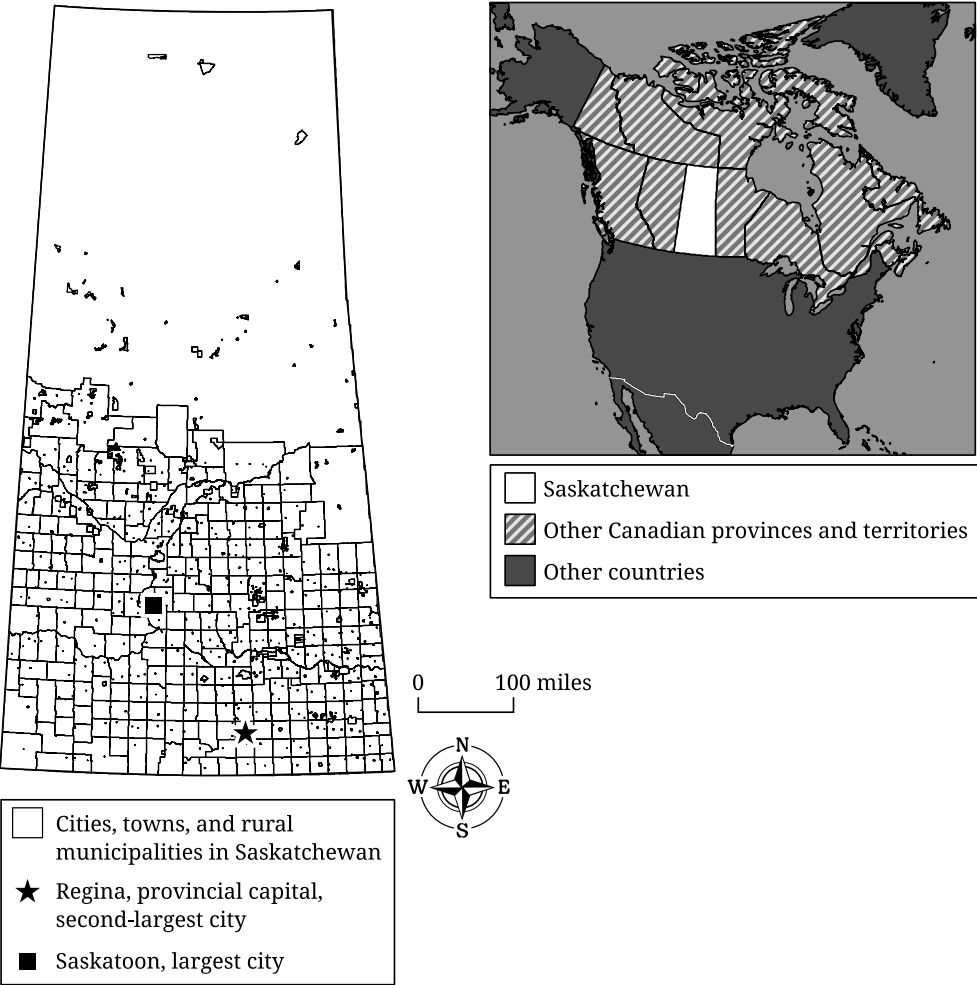
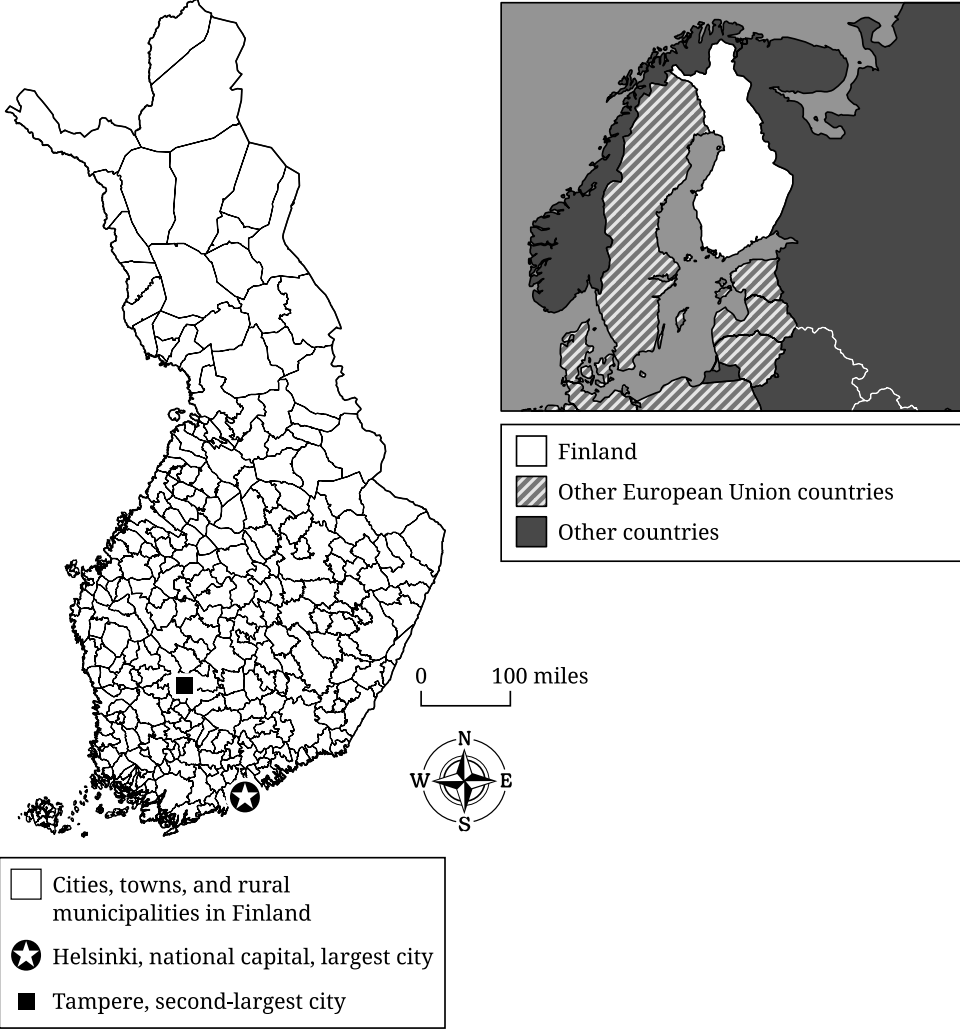


Map 1: Political Divisions in Saskatchewan, Canada



Source: Statistics Canada

Map 2: Political Divisions in Finland



Source: ESRI Data Partners

3. The two maps show political boundaries in Saskatchewan, Canada, and in Finland. Both Finland and Saskatchewan are home to populations of indigenous peoples with a significant amount of political autonomy. Finland is a member state of the European Union.

Respond to parts A, B, C, D, E, F, and G.

- A. Identify the scale of analysis used for Finland’s political divisions in Map 2.
- B. Define geometric boundaries as shown in Map 1.
- C. Describe one function of internal boundaries.
- D. Explain how the spatial organization of a country such as Canada is affected by a federal system of governance.
- E. Explain how the supranational organization shown in Map 2 may limit the actions of Finland as a member state.
- F. Describe one characteristic of a cultural landscape that may reflect cultural beliefs and identities.
- G. Explain how communication technologies may affect the cultural patterns of indigenous languages.

STOP
END OF EXAM

SELECTED TECHNOLOGY RESEARCH AND DEVELOPMENT AREAS
IN THE MEDICAL FIELD

Category	Product or Service
Biotechnology:	• Genetic engineering research • Biochemistry research • Diagnostic and testing science
Gene therapies:	• Cancer treatments • Neurological treatments • Rare and genetic disease treatments • Antiviral treatments and vaccines (e.g., Moderna)

3. Since the 1980s, the northeastern United States has developed into a major global center of high-technology industry that specializes in the medical field.
- A. Describe the spatial pattern of the companies and institutions shown in the inset map.
- B. Describe the concept of a growth pole.
- C. Explain ONE way education infrastructure affects a region’s potential for high-technology development.
- D. Explain how the pattern shown on the map resembles the galactic city model.
- E. Explain ONE way local economic changes may be a result of deindustrialization.
- F. Explain how the products and services listed in the table demonstrate that this economy has moved into the quaternary sector.
- G. The map focuses on a regional scale. Explain a possible limitation of drawing country scale conclusions from a regional scale map.

Begin your response to this question at the top of a new page in the separate Free Response booklet and fill in the appropriate circle at the top of each page to indicate the question number.

STOP

END OF EXAM

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