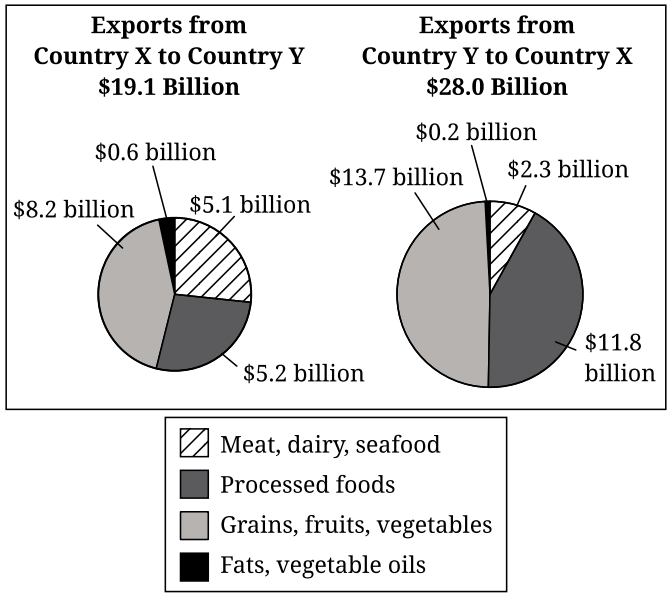
Food Exports Between Country X and Country Y



2. Country X and Country Y have a long-established trade relationship in agricultural products. Country X is a developed country, and Country Y is a developing country.

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

A. Using the data in the charts, identify the largest food export category between the two countries.

B. Using the data in the charts, describe the difference between the two countries in the meat, dairy, and seafood category.

C. Define the concept of comparative advantage.

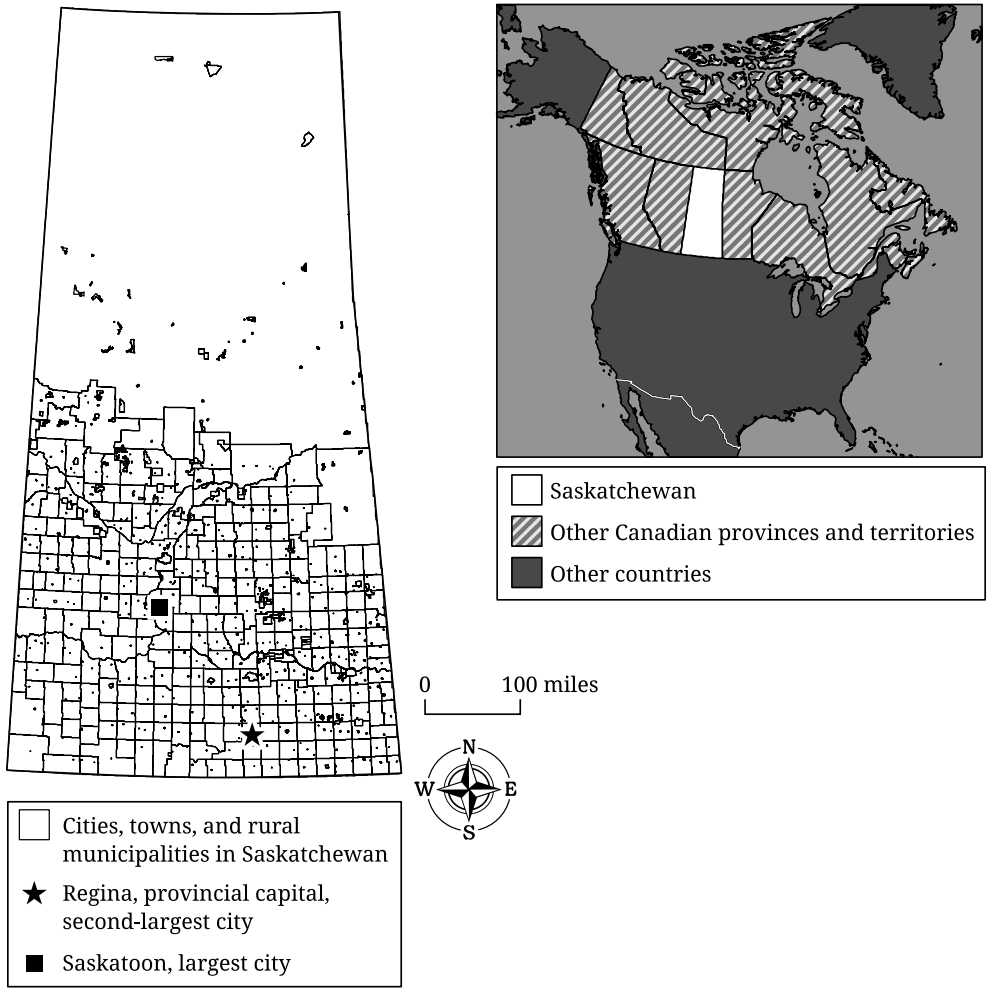
D. Describe one effect of Green Revolution technologies on food supplies in developing countries.

E. Explain how advances in agricultural technology may increase the carrying capacity of land.

F. Explain the degree to which the economies of Country X and Country Y are interdependent. (Response must indicate the degree [low, moderate, high] and provide an explanation.)

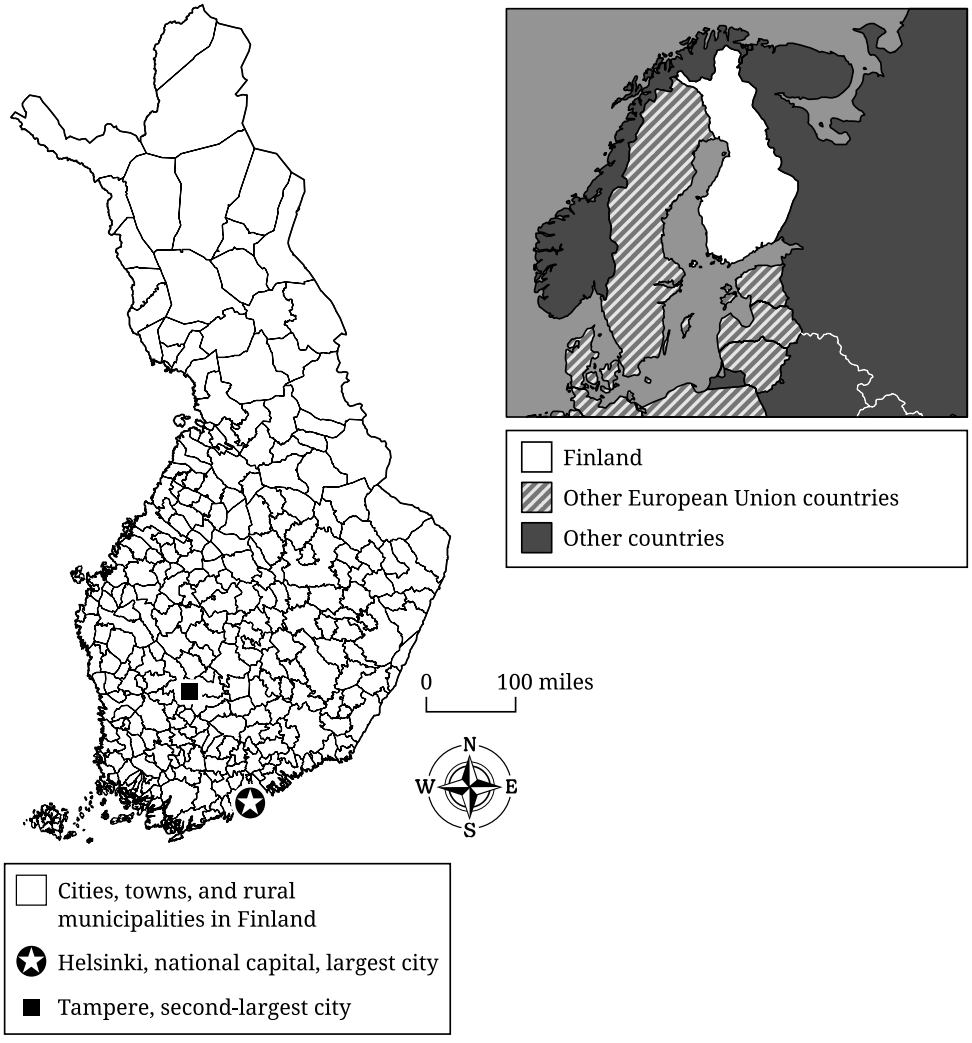
G. Explain how the charts provide limited information about economic development.

Map 1: Political Divisions in Saskatchewan, Canada



Source: Statistics Canada

Map 2: Political Divisions in Finland



Source: ESRI Data Partners

HUMAN GEOGRAPHY

SECTION II

Time—1 hour and 15 minutes

3 Questions

Directions: You have 1 hour and 15 minutes to answer all three of the following questions. It is recommended that you spend approximately one-third of your time (25 minutes) on each question. It is suggested that you take up to 5 minutes of this time to plan and outline each answer. You may plan your answers in this orange booklet, but no credit will be given for anything written in this booklet. **You will only earn credit for what you write in the separate Free Response booklet.**

Question 1

1. The availability of food in the context of a growing world population is influenced by many social, environmental, and economic factors.

   A. Define the concept of carrying capacity.

   B. Describe ONE way that humans have altered the environmental sustainability of agricultural lands.

   C. Explain how transportation technology has increased economies of scale in the agricultural sector of less developed countries.

   D. Explain a likely negative economic outcome of Green Revolution agricultural practices on rural communities.

   E. Explain ONE weakness of Malthusian theory in predicting the relationship between food production and population growth in contemporary society.

   F. Explain how surplus food production has changed the global market for local agricultural products.

   G. Explain the degree to which Green Revolution agricultural practices were effective in reducing hunger in less developed countries. (Response must indicate the degree [low, moderate, high] and provide an explanation.)

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.

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