

3. The global production of cow's milk and pork results in distinctive spatial patterns of contemporary agriculture and land use.

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

- A. Identify an example of a culture trait.
- B. Describe the spatial pattern of cow's milk production in Africa, shown in Map 1.
- C. Based on Map 1 and Map 2, compare the spatial patterns of cow's milk production and pork production in Asia. (Response must include both maps in the comparison.)
- D. Describe one environmental effect of agricultural land use such as commercial animal farms.
- E. Explain how the globalization of agriculture may affect local culture traits.
- F. Explain why regions of agricultural production may become interdependent.
- G. Explain how domesticated animals such as pigs spatially diffused to create the spatial pattern shown on Map 2.

STOP
END OF EXAM

C (Point 3)	Describe one global outcome of an increase in international trade. Examples of acceptable responses may include the following: <ul style="list-style-type: none">• C1. An increase in international trade allows countries to use comparative advantage and/or complementarity to specialize in the production of goods and/or services.• C2. Increase in globalization, free trade, trade agreements, interdependence, supranational organizations, and/or rising levels of international development.• C3. Outsourcing of jobs from countries with higher labor costs to countries with lower labor costs and/or increased competition between countries.• C4. Deindustrialization in more developed/core countries or regions.• C5. Improved or expanded infrastructure (e.g., port facilities, warehouses, roads, transportation networks).• C6. Increased pollution, use of natural resources, and/or environmental impacts.• C7. New manufacturing zones, free trade zones, special economic zones, and/or export processing zones.• C8. Changes in the economic sectors of national economies and/or changes in methods of production.• C9. Increased potential for supply chain problems (e.g., halted production, delayed shipment, tariffs, trade restrictions, labor shortages, quality control issues, technological integration, sustainability pressures, cost increases).• C10. Wider access to more diverse goods, services, technology, media, and/or ideas.• C11. Lower production costs and/or prices for consumers.	1 point
D (Point 4)	Explain how deindustrialization has affected the economy of core countries. Examples of acceptable responses may include the following: <ul style="list-style-type: none">• D1. Economies have shifted away from manufacturing toward services and technology as the main sources of economic production.• D2. The loss of manufacturing businesses and/or jobs resulted in widespread unemployment, economic decline, and/or less business investment.• D3. Deindustrialization has contributed to an international division of labor and/or an economic sector shift in which core countries have higher-paying jobs.• D4. Outsourcing, offshoring, and/or economic restructuring have led to a decline in jobs in core countries and an increase in jobs in newly industrialized countries (developing countries, semiperiphery).• D5. Core countries and/or cities have developed strategies designed to attract new businesses to replace those lost from deindustrialization (e.g., lower taxes for businesses that relocate).	1 point

E (Point 5)	Explain why international boundaries on land or at sea may lead to disputes over resources. Examples of acceptable responses may include the following: <ul style="list-style-type: none">• E1. Boundaries may be contested due to more than one country or company claiming ownership over a resource.• E2. Countries may disagree with international agreements that define the rights and responsibilities of countries (e.g., United Nations Convention on the Law of the Sea [UNCLOS]).• E3. Political boundaries may be superimposed over resource areas claimed by different countries.• E4. Corporations, indigenous groups, and/or local communities may have competing claims to resources.	1 point
F (Point 6)	Explain how supranational organizations such as the EU or ASEAN may challenge the sovereignty of member states. Examples of acceptable responses may include the following: <ul style="list-style-type: none">• F1. Supranational organizations implement international laws or policies that may result in limitations on the economic or political actions of individual member states.• F2. Supranational organizations may require participation in military alliances or impose changes in regional governance (e.g., border policies, currencies, trade regulations, environmental regulations, labor regulations, taxes, judicial systems) that replace or supersede existing systems of national government in member states.	1 point
G (Point 7)	Explain how advances in communication technologies may affect state sovereignty. Examples of acceptable responses may include the following: <ul style="list-style-type: none">• G1. Advances in technology may affect state sovereignty by facilitating devolution, supranationalism, and/or democratization efforts that change the structure of the state or its system of governance.• G2. Advances in technology may affect state sovereignty by allowing people, social movements, and/or organizations (e.g., other governments, corporations) to communicate faster or more effectively, or to a larger audience, about political issues and/or social justice, leading to changes in law, government policy, strengthening of the state, and/or the devolution of the state.• G3. Advances in technology may affect state sovereignty by increasing the ability of a supranational organization to monitor what is occurring in member states (e.g., upholding agreements and enforcing regulations).	1 point

Question 3: Two Stimuli**7 points**

A (Point 1)	Identify an example of a culture trait. Acceptable identification: <ul style="list-style-type: none">• A1. Culture traits include such things as food preferences, art, architecture, language, religion, music, clothing, media, technology, and/or land use.	1 point
B (Point 2)	Describe the spatial pattern of cow's milk production in Africa, shown in Map 1. Examples of acceptable responses may include the following: <ul style="list-style-type: none">• B1. Medium and/or high amounts of cow's milk production are concentrated or clustered in the north, east, and/or south.• B2. Low amounts of cow's milk production are concentrated or clustered in west, central, and/or southwest Africa.	1 point
C (Point 3)	Based on Map 1 and Map 2, compare the spatial patterns of cow's milk production and pork production in Asia. (Response must include both maps in the comparison.) Examples of acceptable responses may include the following: <ul style="list-style-type: none">• C1. Map 1 shows that cow's milk is produced in most Asian countries at high or medium volumes, whereas Map 2 shows that pork is produced at high or medium volumes in East Asia and/or parts of Southeast Asia, or in low volumes in South and/or Southwest Asia.• C2. Cow's milk is produced in most Asian countries, whereas pork is not produced in regions with large Islamic populations, such as the Middle East (Southwest Asia), Central Asia, South Asia, and/or parts of Southeast Asia.• C3. Cow's milk production and pork production are low in insular Southeast Asia (e.g., Indonesia, Malaysia, East Timor, Papua New Guinea).	1 point

D (Point 4)	Describe one environmental effect of agricultural land use such as commercial animal farms. Examples of acceptable responses may include the following: <ul style="list-style-type: none">• D1. Environmental effects of agriculture land use include pollution (e.g., air, water, waste), land cover change (e.g., soil erosion), nutrient depletion, desertification, and/or soil salinization.• D2. The reduction of water supplies for agricultural purposes, such as depleting reservoirs, lowering the local water table, and/or draining aquifers.• D3. The reduction of biodiversity from changes in land cover (e.g., deforestation, grassification, feed-crop monoculture).• D4. The spread of disease between domestic and wild animal populations or between animal populations and humans.• D5. Climate change and/or global warming because such farms produce greenhouse gases (e.g., carbon dioxide, methane, water vapor).• D6. Agricultural land use can promote the survival or the growth of environmentally beneficial species (e.g., pollinators, working animals, heirloom varieties).	1 point
E (Point 5)	Explain how the globalization of agriculture may affect local culture traits. Examples of acceptable responses may include the following: <ul style="list-style-type: none">• E1. Globalization of agriculture and/or the global system of agriculture may lead to changes in food preferences.• E2. Globalization may lead to people preferring to eat foods imported from other countries that were not previously available to them (e.g., tropical fruits in temperate climates).• E3. Globalization may lead to the availability of less expensive imported foods that are substituted for more expensive local foods (e.g., imported wheat replacing locally grown corn).• E4. Consumers may resist the globalization of the food supply and in response buy domestically produced food, local food, and/or purchase food from community-supported agriculture.• E5. Globalization of agriculture may lead to a reduction in the number of small family farms, which can affect local cultural traits (e.g., settlement patterns by prompting rural-to-urban migration, social roles by having fewer people working in agriculture).• E6. Globalization may lead to changes in agricultural land use or agricultural production methods through the implementation of new technologies, architecture, and/or equipment (e.g., data analytics, drones, vertical farming, autonomous tractors), affecting local culture traits (e.g., crops, farming practices).	1 point

F (Point 6)	Explain why regions of agricultural production may become interdependent. Examples of acceptable responses may include the following: <ul style="list-style-type: none">• F1. Some regions and/or countries have become highly dependent on one or more export commodities, which causes different regions to depend on one another for specific agricultural commodities.• F2. Regions of agricultural production are connected through global food distribution networks that are affected by political relationships, infrastructure, and/or patterns of world trade.• F3. Global patterns of food-processing facilities and markets, economies of scale, distribution systems, and government policies all contribute to greater interdependence among agricultural production regions.• F4. Countries may develop comparative advantages, complementarity, specialty crops, and/or consumer markets that establish trade relationships and increase interdependence between two or more countries.• F5. Countries in a region may form trade relationships that result in increased trade in farm products (e.g., EU, ASEAN, MERCOSUR).	1 point
G (Point 7)	Explain how domesticated animals such as pigs spatially diffused to create the spatial pattern shown on Map 2. Examples of acceptable responses may include the following: <ul style="list-style-type: none">• G1. Domesticated animals such as pigs diffused from their hearths of domestication through relocation diffusion (e.g., settlers bringing animals to new areas).• G2. Domesticated animals such as pigs diffused from their hearths of domestication through the Columbian Exchange.• G3. International trade, imperialism, and/or colonization introduced domesticated animals such as pigs that were transported to other regions of the world.• G4. Domesticated animals such as pigs spread through migration or expansion diffusion, altering food preferences and/or increasing demand for diverse animal products domestically and/or internationally.• G5. Domesticated animals such as pigs spread to areas where consumption of these animals was culturally acceptable and/or did not spread to areas where consumption of such animals was culturally unacceptable.	1 point