

2025



AP[®] Human Geography

Sample Student Responses and Scoring Commentary Set 1

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Free-Response Question 3

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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.	1 point
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).		
E (Point 5)	Explain how the globalization of agriculture may affect local culture traits.	1 point
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).		

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

- A. An example of a culture trait is a specific language spoken in a culture, such as Flemish in the Flanders region.
- B. The spatial pattern of cow's milk production in Africa, shown in Map 1, is mostly low production volume in western and central Africa, with medium production volume located in eastern Africa, South Africa, and northwest Africa.
- C. The spatial patterns of cow's milk production and pork production in Asia have some similarities. The pattern of cow's milk production in Asia has high production volume concentrated in Russia, China, and India, with medium production volume seen in the middle east and southeast Asia. The pattern of pork production in Asia has high production volumes concentration in Russia and China, with some medium production volumes in southeast Asia. However, the remaining portion of Asia has low production volume of pork. There are some similar locations with high production volume of both products, such as Russia and China, but the rest of Asia has differing volumes of production between milk and pork.
- D. One environmental effect of agricultural land use such as commercial animal farms is pollution of water sources through the use of herbicides. Commercial animal farms need a large amount of food to feed their animals, which causes the farms to grow fields of grain for feed. Often, herbicides are used to prevent weeds from growing among the crop, and the herbicides can flow in to nearby water sources and pollute them.
- E. The globalization of agriculture may affect local cultural traits due to the commercialization of agriculture. The globalization of agriculture affects local cultural traits through the process of commercialization of agriculture. The commercialization can take over subsistence and family farms to consolidate into larger commercial farms. The development of larger farms often overshadows smaller local farms, driving them out of business or forcing them to sell their land. This affects the local cultural traits by destroying the sense of place with local agricultural practices and combining them into larger, placeless, uniform commercial farms.
- F. Regions of agricultural production may become interdependent because of the differences in climate. Climates around the world are each specifically suited to growing different types of crops, such as coffee in central America and grains in the midwest United States. This causes regions to have to trade with different climate regions in order to have access to a variety of products. Therefore, regions of agricultural production become interdependent in order to have access to other types of crops.

Sample 3A 2 of 2

G. Domesticated animals such as pigs spatially diffused to create the spatial pattern shown on Map 2. The diffusion process of domesticated pigs began in the Eurasian region where the hearth of domesticated animals began. From there, nomadic herders dispersed through Asia and Europe with their livestock until the Columbian Exchange in the 15th and 16th centuries. The Columbian Exchange brought domesticated plants and animals into the Americas, which accounts for the presence of domesticated pigs there and the spatial pattern shown in Map 2.

- (A) One example of culture trait can be the religion a population of a country practices.
- (B) In map 1, the production of cow's milk in Africa is dispersed and varies between high and low throughout the region.
- (C) Pork production is most prominent in more developed countries as can be seen in map 2, such as United States, Canada, Russia, China and Brazil who are highly engage in the production of pork whereas map 1 shows how cow's milk production is more dispersed throughout the world with some developed countries engaging in the production of milk and some less developed countries also engaging in cow's milk production.
- (D) One environmental effect of agricultural land use such as commerical animal farms is the usage of large portions of land. In order to have livestock farmers need a large plot, nowadays we have seen a shift in commercial farming from owning extensive land to care for the livestock to having less area for the livestock and changing their diets from grass fed to grain fed. This can lead to soil depletion as farmers might engage in monocropping to prioritize and maximize the production of grain necessary to feed the livestock and produce higher yields while occupying less land.
- (E) Globalization of agriculture may affect local cultural traits by changing agricultural practices and the diets of people. For example we can see the impacts of globalization in agriculture through the Green Revolution which allowed less developed countries to produce higher yields but this also created negative environmental impacts from the constant use of fertilizers. The Green revolution also changed the diets of the people in less developed countries as farmers started to grow seeds sent from more developed countries and also use hybrid seeds which limit and shaped their diets expiriencing a shift from traditional diets to a diet similar to the ones on more developed countries.
- (F) Regions of agricultural production may become interdependent with one another because of their resources and climate. One region might be able to produce a certain product while other another product. For example the tropical climate in Central America allows farmers to engage in plantation agriculture year long while United States might engage in a different type of agriculture such as livestock and ranching this creates a commodity advantage betwen countries due to what they are able to produce which increases the interdependence with one another and encourages trade to happen.
- (G) The expansion and relocation diffusion of domesticated animals such as pigs contributed to the spatial patter shown on map 2 as countries in the Americas, such as Brazil in South America and United States and Canada in North America are able to engage in pork production due to the early diffusion of domesticated animals that happened during the Columbian exchange where Europeans colonizers introduced a various domesticated animals to the new world allowing them to engage in a different type of agriculture more focues on animals rather than plants.

- A. An example of a culture trait would be your language. Every culture has a language, making it a good example of a culture trait.
- B. The spatial pattern of cow's milk in Africa is clustered. Some areas that are clustered have a medium production volume, and the other areas that are also clustered have a low production volume.
- C. Comparing both maps, more milk is produced than pork in Asia. In China, though, there is an equal amount. However, if you look in the other Asian countries, in map 2, there is a low production volume of pork. If you look in map 1, however, there is a fair mix of medium and high production volumes of cow's milk.
- D. One environmental effect of agricultural land use would be if you don't live in a healthy environment for certain animals, the resources you produce would not be as good as if you lived in a healthy environment.
- E. Globalization of agriculture would affect local culture traits by the diet of those certain cultures. For example, if you believe in a certain religion that specifically your culture believed in and your religion has a certain diet where you cannot eat a specific meat or plant, that would be a negative affect.
- F. Regions of agricultural production may become interdependent because some things cannot be done alone. If you need to get a certain job done on your farm, but you cannot accomplish that job alone, you could have somebody by your side who is able to help.
- G. Domesticated animals such as pigs are spatially diffused because certain areas have the right environment for a pig to live in, and some areas don't have the right living conditions for a domesticated animal like a pig.

Question 3

Note: Student samples are quoted verbatim and may contain spelling and grammatical errors.

Overview

NEW for 2025: The question overviews can be found in the *Chief Reader Report on Student Responses on AP Central*.

Sample: 3A

HG Point 1 Score: 1

HG Point 2 Score: 1

HG Point 3 Score: 1

HG Point 4 Score: 1

HG Point 5 Score: 1

HG Point 6 Score: 1

HG Point 7 Score: 1

Score: 7

The response to part A earned 1 point. The response correctly identifies a culture trait by stating, “a specific language spoken in a culture, such as Flemish in the Flanders region.”

The response to part B earned 1 point. The response correctly describes the spatial pattern of cow’s milk production in Africa by stating that there is “mostly low production volume in western and central Africa, with medium production volume located in eastern Africa, South Africa, and northwest Africa.”

The response to part C earned 1 point. The response correctly compares the spatial patterns of cow’s milk production and pork production in Asia by stating that, “The pattern of cow’s milk production in Asia has high production volume concentrated in Russia, China, and India, with medium production volume seen in the middle east and southeast Asia. The pattern of pork production in Asia has high production volumes concentration in Russia and China, with some medium production volumes in southeast Asia.”

The response to part D earned 1 point. The response correctly describes one environmental effect of agricultural land use such as commercial animal farms by stating that one effect “is pollution of water sources through the use of herbicides.”

The response to part E earned 1 point. The response correctly explains how the globalization of agriculture may affect local culture traits by stating that, “The development of larger farms often overshadows smaller local farms, driving them out of business or forcing them to sell their land. This affects the local cultural traits by destroying the sense of place with local agricultural practices and combining them into larger, placeless, uniform commercial farms.”

The response to part F earned 1 point. The response correctly explains why regions of agricultural production may become interdependent by stating that, “Climates around the world are each specifically suited to growing different types of crops, such as coffee in central America and grains in the midwest United States. This causes regions to have to trade with different climate regions in order to have access to a variety of products.”

Question 3 (continued)

The response to part G earned 1 point. The response correctly explains how domesticated animals such as pigs spatially diffused to create the spatial pattern shown on Map 2 by stating that, “The diffusion process of domesticated pigs began in the Eurasian region where the hearth of domesticated animals began” and that “The Columbian Exchange brought domesticated plants and animals into the Americas, which accounts for the presence of domesticated pigs there and the spatial pattern shown in Map 2.”

Question 3 (continued)**Sample: 3B****HG Point 1 Score: 1****HG Point 2 Score: 0****HG Point 3 Score: 0****HG Point 4 Score: 1****HG Point 5 Score: 1****HG Point 6 Score: 1****HG Point 7 Score: 1****Score: 5**

The response to part A earned 1 point. The response correctly identifies a culture trait by stating, “One example of culture trait can be the religion a population of a country practices.”

The response to part B did not earn a point. The response incorrectly describes the spatial pattern of cow’s milk production in Africa by stating that, “In map 1, the production of cow’s milk in Africa is dispersed and varies between high and low throughout the region.” The response would have earned the point if it had stated that medium and/or high amounts of cow’s milk production are concentrated or clustered in the north, east, and/or south.

The response to part C did not earn a point. The response incorrectly compares the spatial patterns of cow’s milk production and pork production in Asia by stating that the United States, Canada, Russia, China and Brazil engage in high levels of pork production and that “cow’s milk production is more dispersed throughout the world.” The response would have earned the point if it had stated that 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.

The response to part D earned 1 point. The response correctly describes one environmental effect of agricultural land use such as commercial animal farms by stating that commercial animal farms “can lead to soil depletion as farmers might engage in monocropping to prioritize and maximize the production of grain necessary to feed the livestock and produce higher yields while occupying less land.”

The response to part E earned 1 point. The response correctly explains how the globalization of agriculture may affect local culture traits by stating that, “The Green revolution also changed the diets of the people in less developed countries as farmers started to grow seeds sent from more developed countries and also use hybrid seeds which limit and shaped their diets experiencing a shift from traditional diets to a diet similar to the ones on more developed countries.”

The response to part F earned 1 point. The response correctly explains why regions of agricultural production may become interdependent by stating that, “For example the tropical climate in Central America allows farmers to engage in plantation agriculture year long while United States might engage in a different type of agriculture such as livestock and ranching this creates a commodity advantage between countries due to what they are able to produce which increases the interdependence with one another and encourages trade to happen.”

The response to part G earned 1 point. The response correctly explains how domesticated animals such as pigs spatially diffused to create the spatial pattern shown on Map 2 by stating that, “due to the early diffusion of domesticated animals that happened during the Columbian exchange where Europeans colonizers introduced a various domesticated animals to the new world allowing them to engage in a different type of agriculture more focuses on animals rather than plants.”

Question 3 (continued)**Sample: 3C****HG Point 1 Score: 1****HG Point 2 Score: 0****HG Point 3 Score: 1****HG Point 4 Score: 0****HG Point 5 Score: 0****HG Point 6 Score: 0****HG Point 7 Score: 0****Score: 2**

The response to part A earned 1 point. The response correctly identifies language as a culture trait.

The response to part B did not earn a point. The response incorrectly describes the spatial pattern of cow's milk production in Africa by stating that, "The spatial pattern of cow's milk in Africa is clustered in certain areas. Some areas that are clustered have a medium production volume, and the other areas that are also clustered have a low production volume." The response would have earned the point if it had stated that medium and/or high amounts of cow's milk production are concentrated or clustered in the north, east, and/or south.

The response to part C earned 1 point. The response correctly compares the spatial patterns of cow's milk production and pork production in Asia by comparing China in both maps and stating that, "if you look in the other Asian countries, in map 2, there is a low production volume of pork. If you look in map 1, however, there is a fair mix of medium and high production volumes of cow's milk."

The response to part D did not earn a point. The response incorrectly describes one environmental effect of agricultural land use such as commercial animal farms by stating that, "if you don't live in a healthy environment for certain animals, the resources you produce would not be as good as if you lived in a healthy environment." The response would have earned the point if it had described pollution, land cover change, nutrient depletion, desertification, and/or soil salinization.

The response to part E did not earn a point. The response incorrectly explains how the globalization of agriculture may affect local culture traits by stating that, "if you believe in a certain religion that specifically your culture believed in and your religion has a certain diet where you cannot eat a specific meat or plant, that would be a negative affect." The response would have earned the point if it had stated that globalization of agriculture and/or the global system of agriculture may lead to changes in food preferences.

The response to part F did not earn a point. The response incorrectly explains why regions of agricultural production may become interdependent by stating that "some things cannot be done alone. If you need to get a certain job done on your farm, but you cannot accomplish that job alone, you could have somebody by your side who is able to help." The response would have earned the point if it had stated that 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.

The response to part G did not earn a point. The response incorrectly explains how domesticated animals such as pigs spatially diffused to create the spatial pattern shown on Map 2 by stating that, "certain areas have the right environment for a pig to live in, and some areas don't have the right living conditions for a domesticated animal like a pig." The response would have earned the point if it had stated that domesticated animals such as pigs diffused from their hearths of domestication through relocation diffusion.