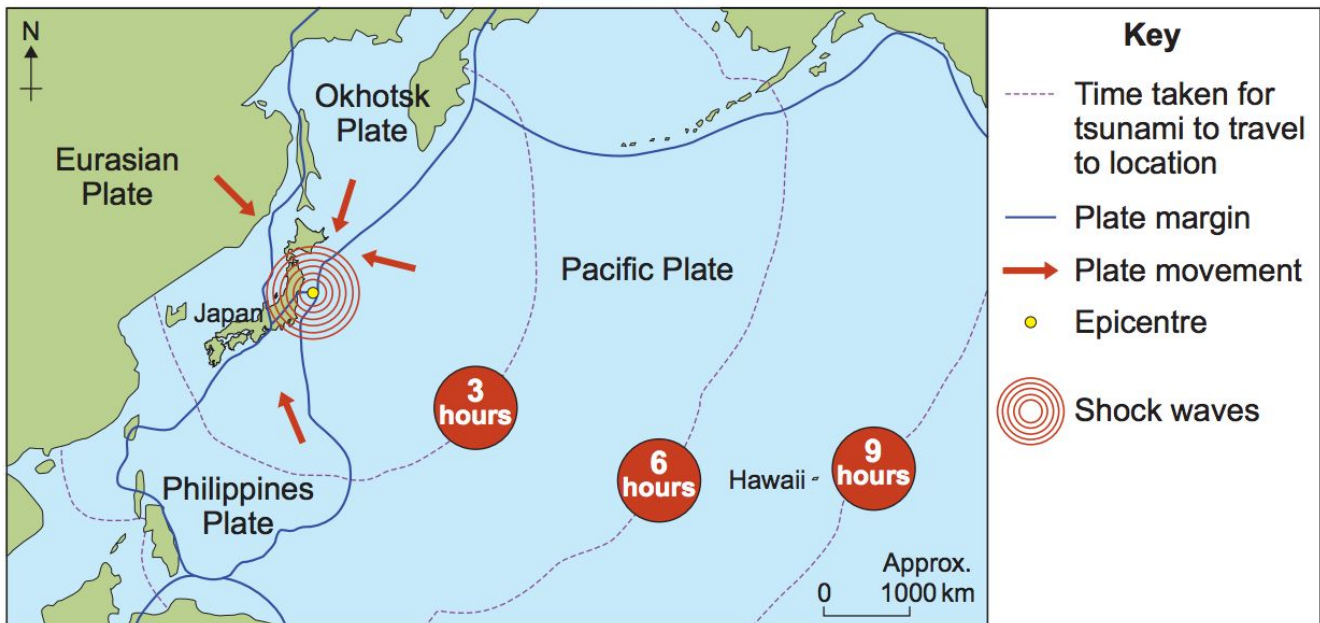


2017 United States Geography Olympiad - Map Skills Examination

General instructions -

Respond to each of the following questions on the answer document provided. Only answers written in the appropriate space on the answer document will be marked. Where appropriate, you should write sentences or phrases instead of single words. If a question or section asks for a specific number of reasons or answers, give only the required number of answers specified. The examination consists of seven sections, and each section will be worth the specified number of marks. You have one hour to complete this section of the examination and the accompanying forty multiple choice questions.

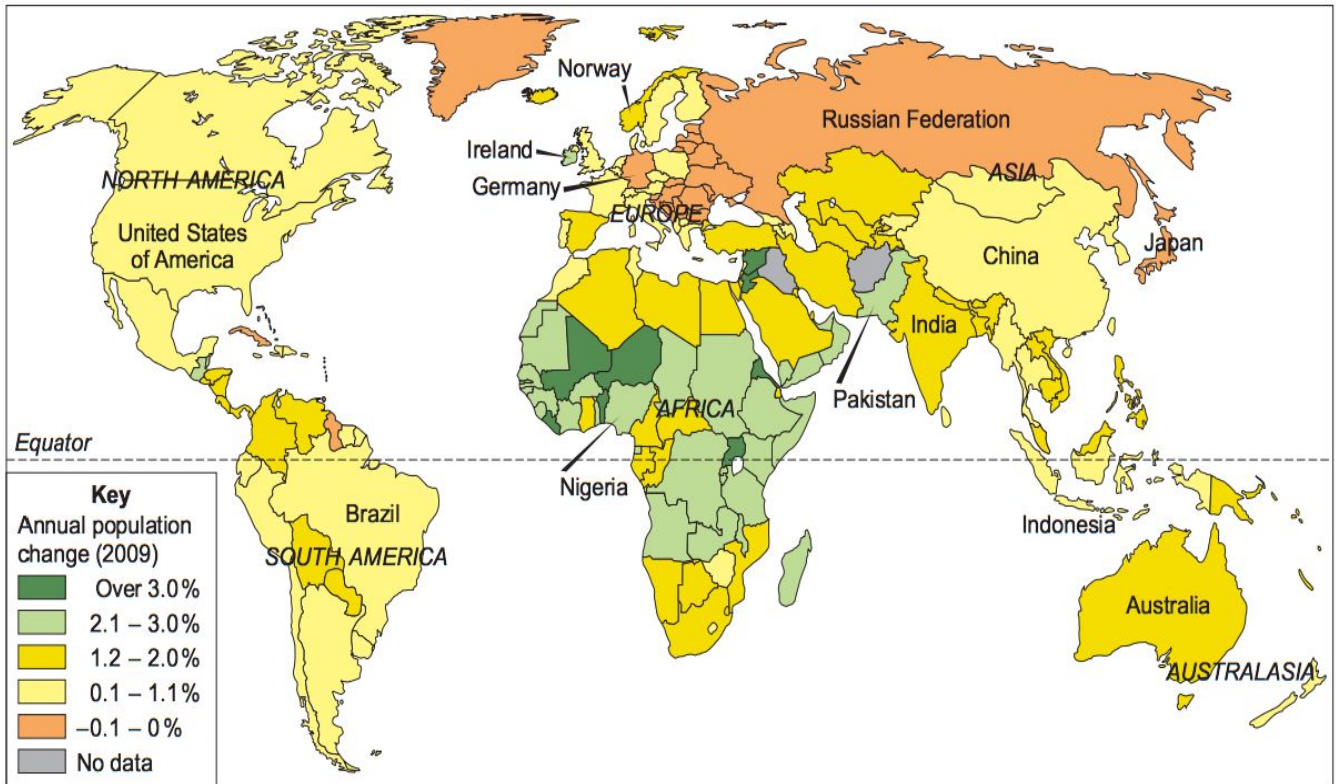
Section 1 [10 marks]



Map of March 2011 Japanese earthquake and tsunami

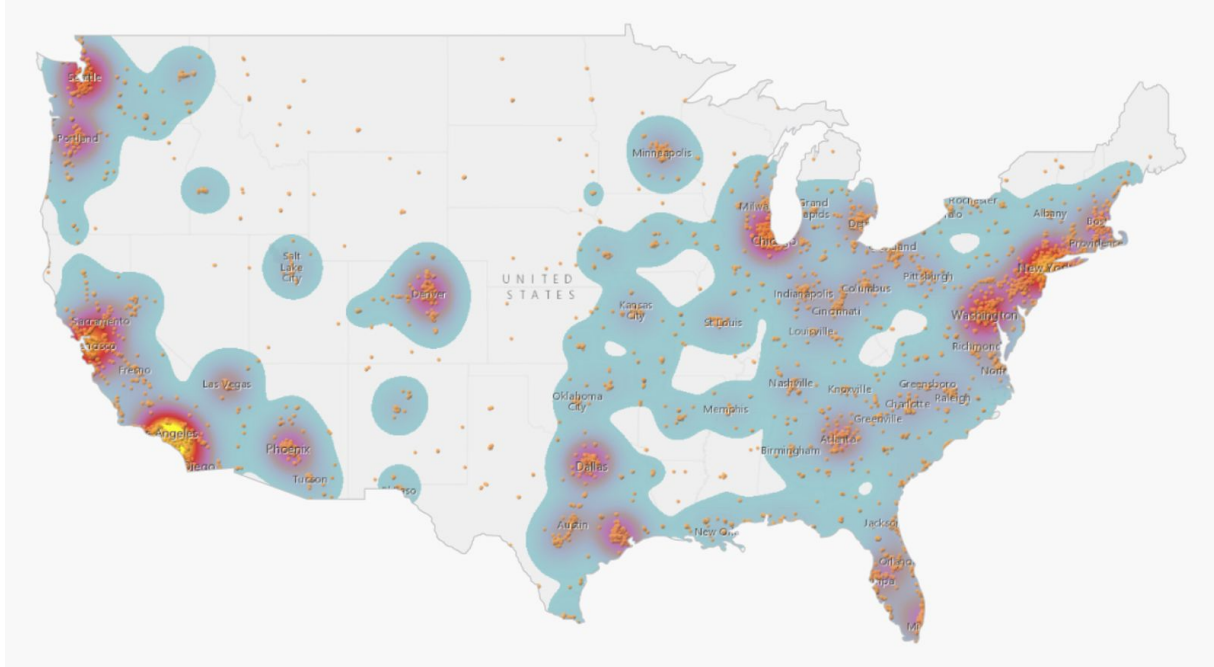
1. Describe, in as much detail as possible in the space provided, the epicenter of the earthquake. What are the approximate coordinates of the epicenter?
2. Explain, in as much detail as possible in the space provided, the cause of the Japanese tsunami.
3. Given the information on the map, and that the earthquake occurred at 05:46 UTC, at what approximate time would the tsunami have reached each of the following locations - Hawaii, California, Mexico, Chile

Section 2 [9 marks]

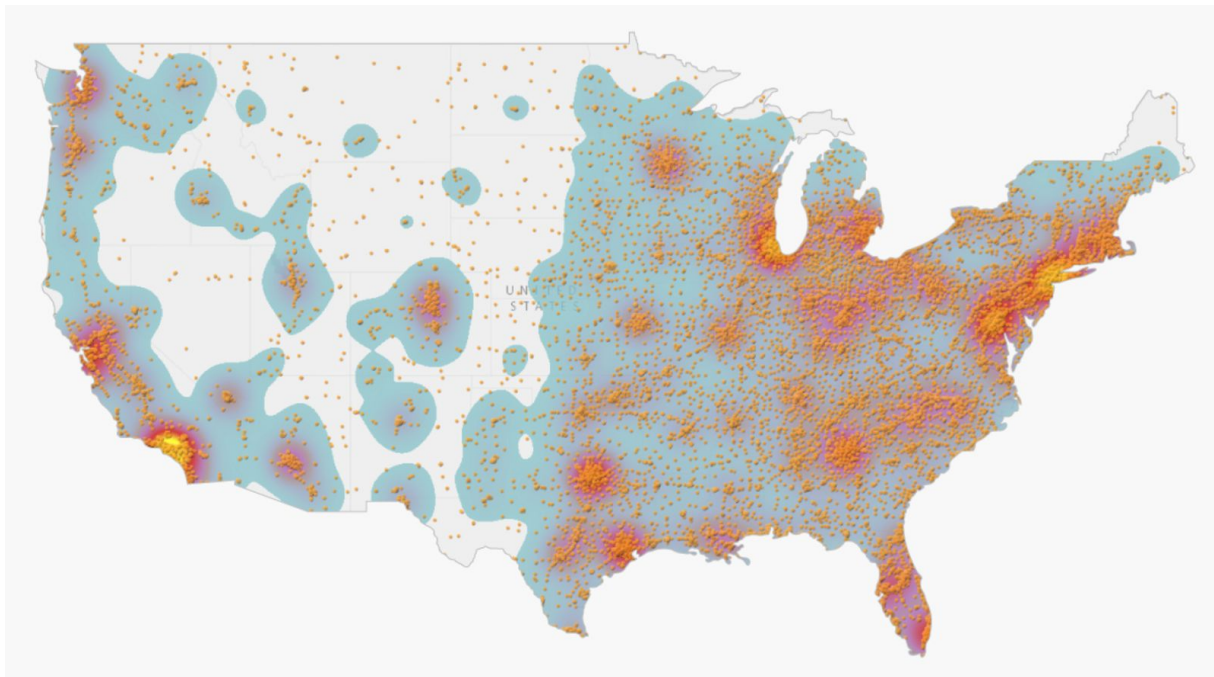


1. According to the map, what is the rate of annual population change in Cuba? What are two factors that might account for this rate of change?
2. Identify two countries in Africa that have an annual population growth rate over three percent.
3. According to the map, how does the rate of population change for each of the following nations compare to that of the Russian Federation - Kazakhstan, Georgia, Lithuania, Kyrgyzstan

Section 3 [6 marks]



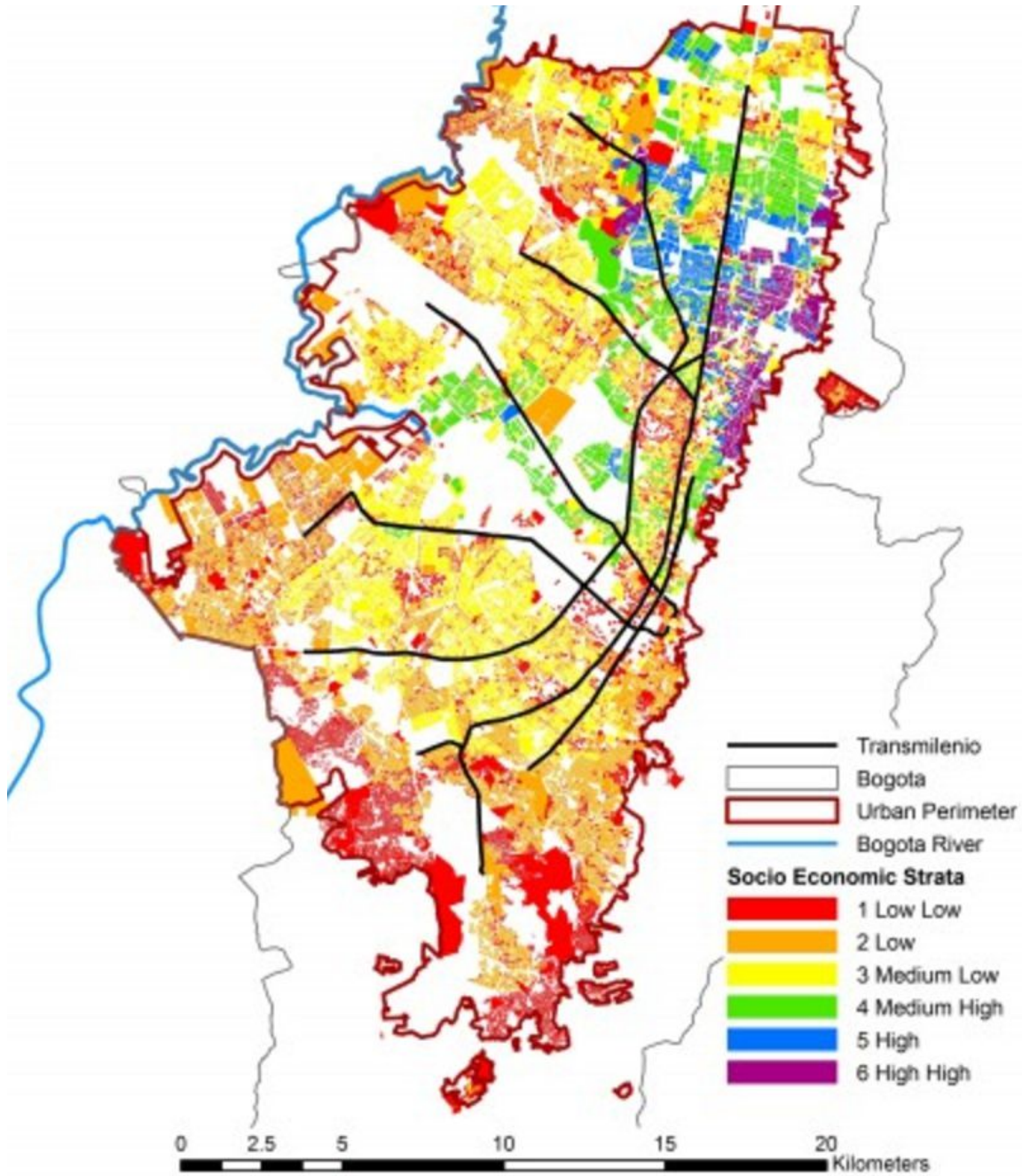
Map of Starbucks locations in the United States (2016)



Map of Subway locations in the United States (2016)

1. Given the information on the maps, compare and contrast the geographic distribution of Starbucks and Subway franchises in the United States.
2. Give at least two factors that might account for the pattern of distribution of Starbucks locations. In what two specific geographic regions of the country would you expect Starbucks sales to be the highest?

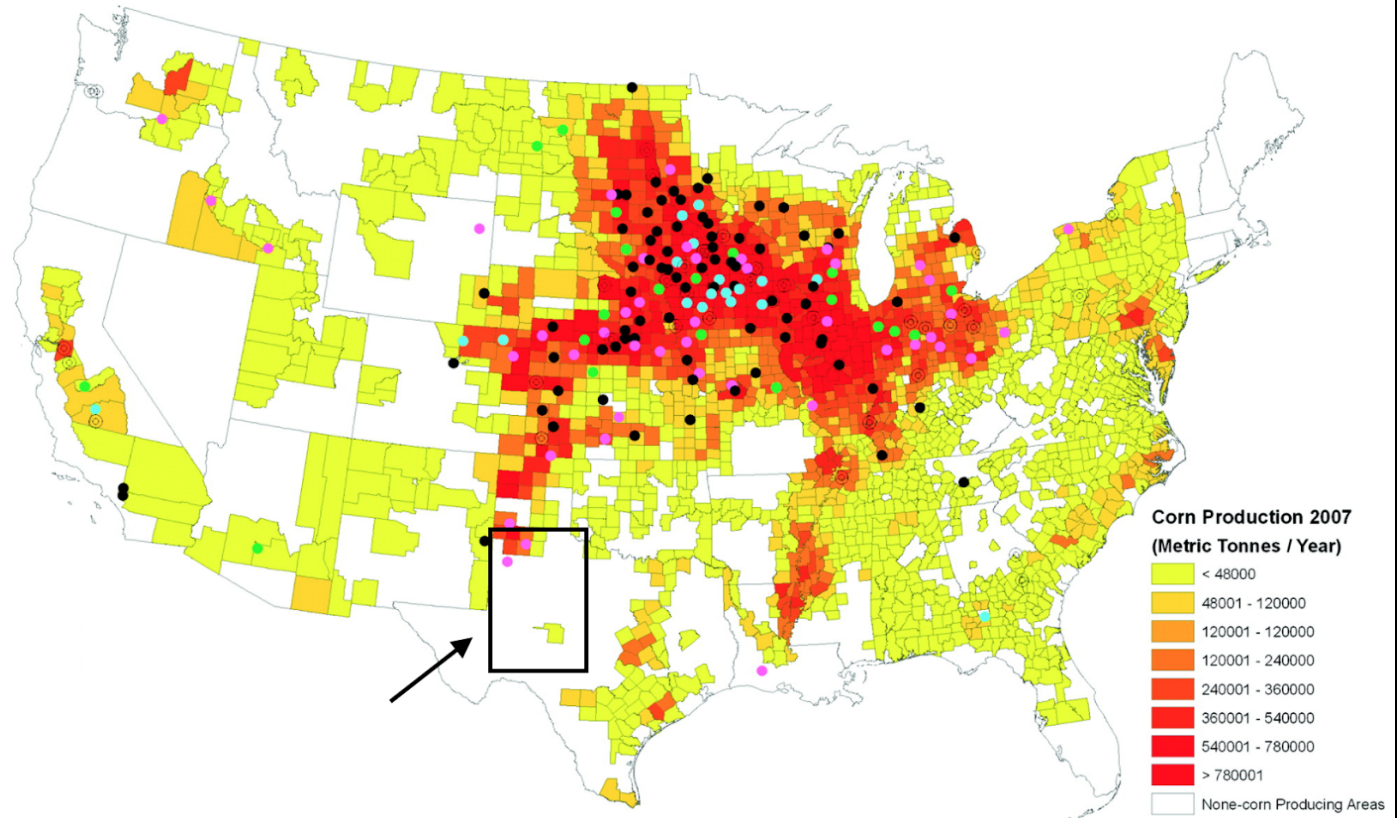
Section 4 [7 marks]



Socioeconomic Strata of Bogotá, Colombia (2011)

1. Identify three specific uses for the land within the urban perimeter that would result in the large white spaces depicted on the map.
2. In 1994, the Colombian government made the stratification system illustrated here into law in order to grant subsidies to the poorest residents. Identify two potential benefits of this system for residents of strata 1 and 2. Identify two potential reasons for the cluster of strata 4, 5 and 6 in the northern section of town.

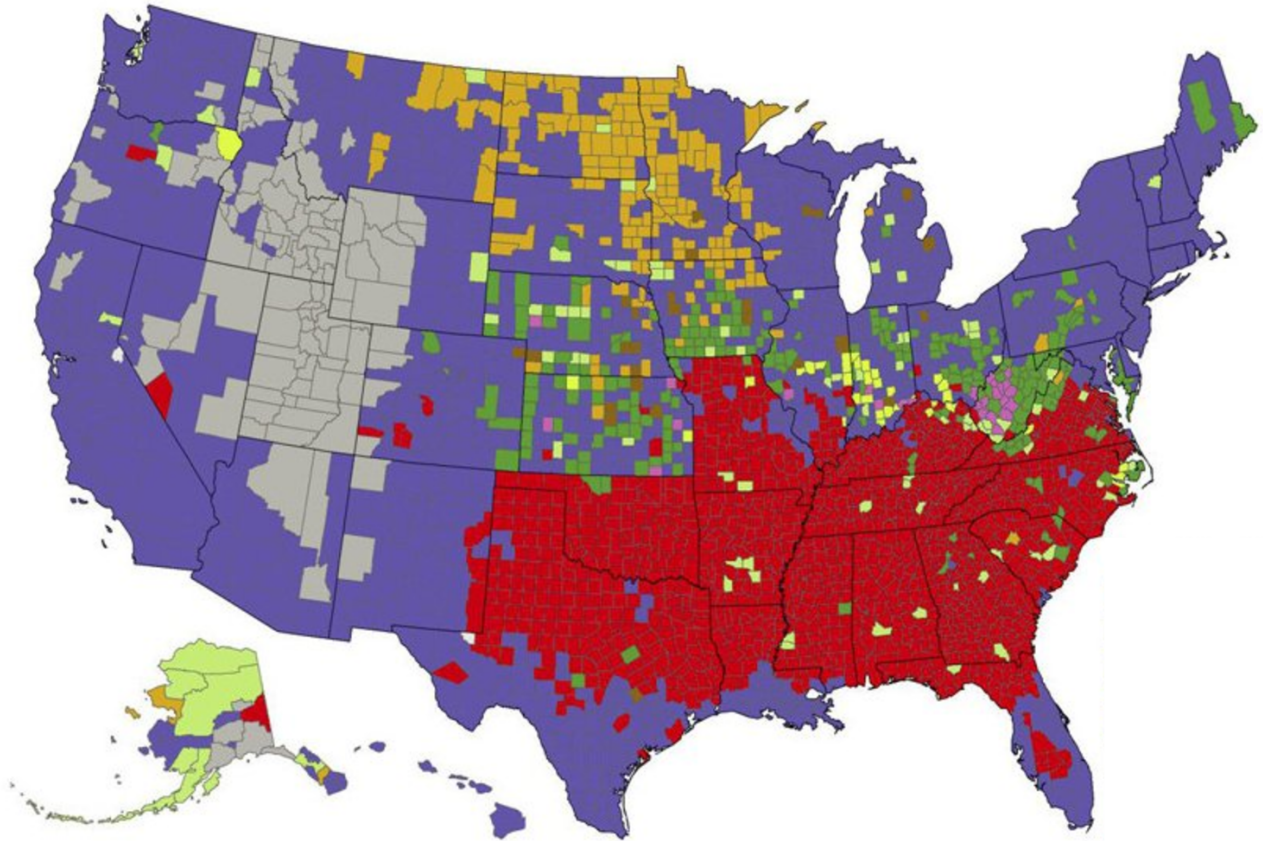
Section 5 [7 marks]



1. Given the information depicted in the map, what type of energy production is most likely represented by the dots?
2. Identify three reasons why this type of energy production would take place in the area of the United States indicated by the dots.
3. The area of Texas marked with the rectangle is a center for a certain type of renewable energy production. What type of energy would likely be produced in this area? Identify two geographic reasons why this type of energy would be produced in this region.

Section 6 [9 marks]

Largest Participating Religious Group
Group with the Largest Number of Adherents by County, 2010



1. Identify the specific denomination represented by each of the following colors - purple, red, grey, and orange.
2. What is the most likely reason for the concentration of light green areas in Alaska?
3. Briefly explain the weakness of representing the geography of religion in the United States using a map of this type. Identify one way you would change this map to make it a more accurate representation.

Section 7 [7 marks]



Top ten global remittance flows, 2010 [in BN USD]

1. According to the information on the map, list, in order of monetary value from greatest to least, the four top beneficiaries of remittance flows and their respective monetary values.
2. Identify three reasons why so many of these remittance flows originate in the United States.