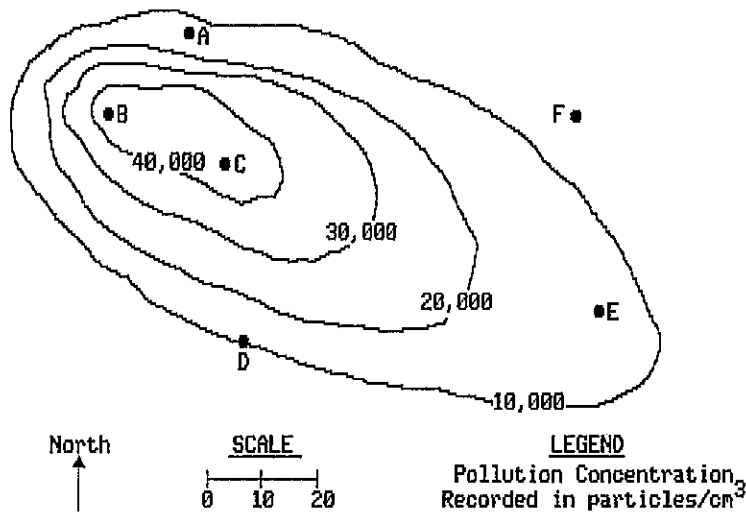


Name: _____
 Field Maps (FIELD #1)

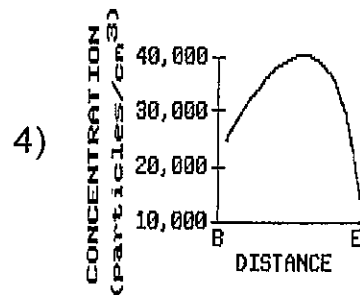
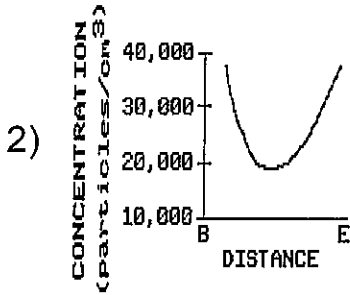
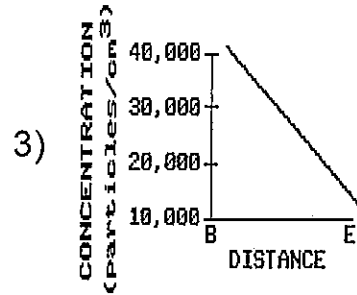
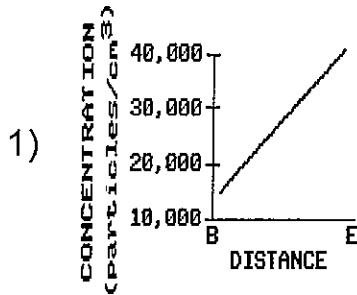
Questions 1 through 3 refer to the following:

In the air pollution field map shown below, the isolines represent the concentration of pollutants measured in particles/cm³.

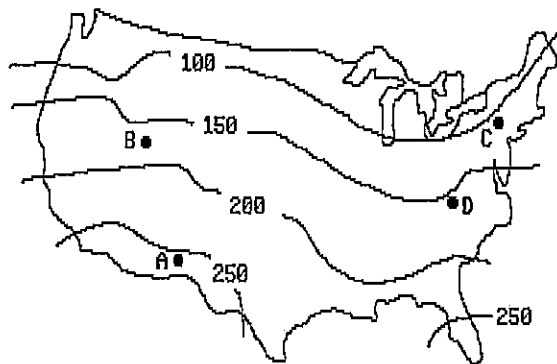


- ___ 1) The major source of air pollution is most likely at point
 1) B 2) A 3) D 4) E
- ___ 2) The winds responsible for this air pollution pattern are most likely blowing from the
 1) southwest 3) northeast
 2) southeast 4) northwest

___ 3) Which graph best represents the relationship between the pollution concentration and distance from point B toward point E?



___ 4) The map below shows the isolines of average daily insolation received in calories per square centimeter per minute at the Earth's surface. If identical solar collectors are placed at the lettered locations, which collector would receive the *least* insolation?



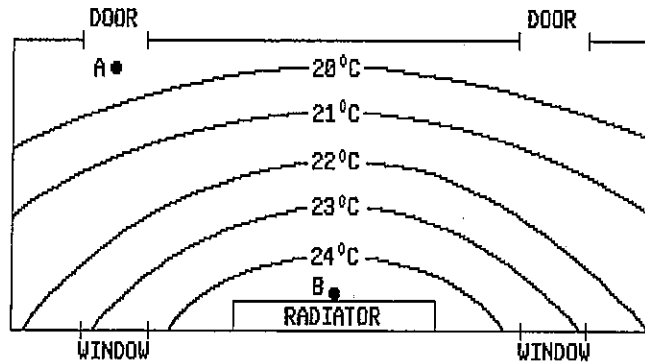
1) C

2) D

3) A

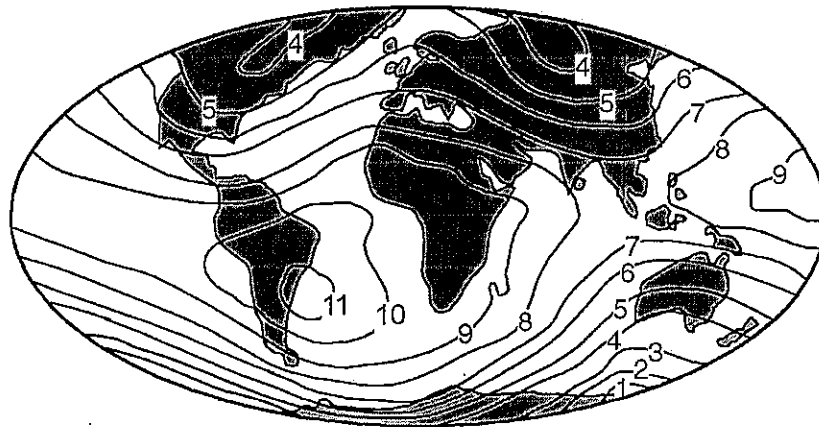
4) B

- ___ 5) The diagram below shows the isothermal pattern obtained at a height of 1 meter above the floor in a classroom during a temperature study in November.



Which conclusion is best supported by this diagram?

- 1) A heat source is located at A.
 - 2) The isotherms indicate the temperatures at only one level in the room.
 - 3) Room temperature at the floor and at the ceiling can be determined.
 - 4) A heat sink is located at B.
- ___ 6) The isoline map below shows the variations in relative strength of Earth's magnetic field from 1 (strong) to 11 (weak).

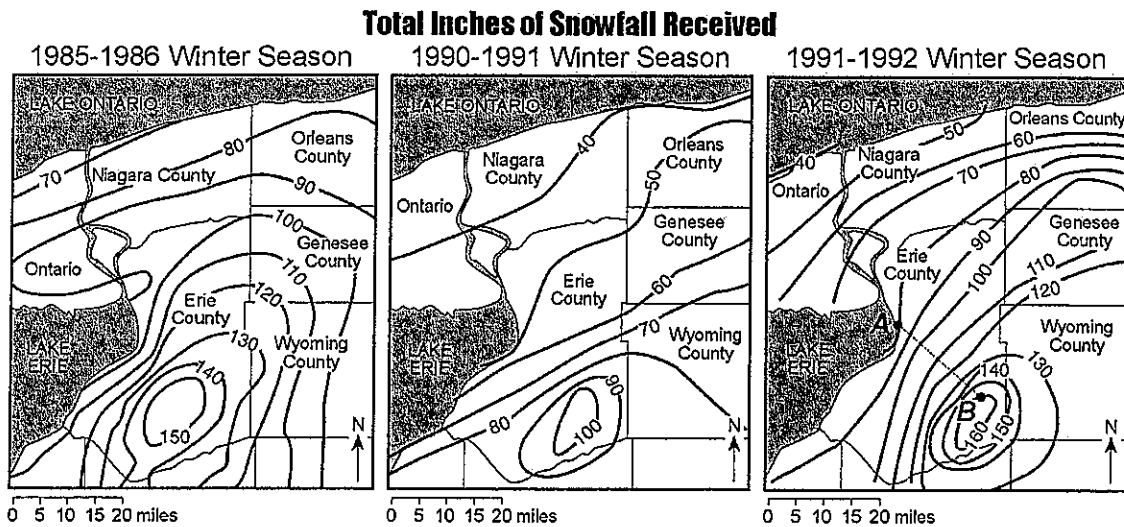


Which of Earth's tectonic plates has the *weakest* magnetic field strength?

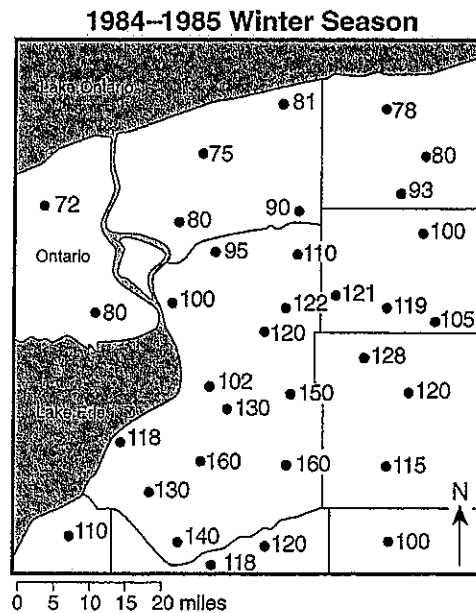
- 1) Pacific plate
- 2) South American plate
- 3) African plate
- 4) North American plate

Name: _____
 Field Maps (FIELD #2)

- 1) The three New York State snow fall maps below represent three different winter seasons. The isolines show the total inches of snowfall received each winter season. Some western New York State counties are labeled on each map. The dotted line *AB* has been drawn on the 1991-1992 winter season map.

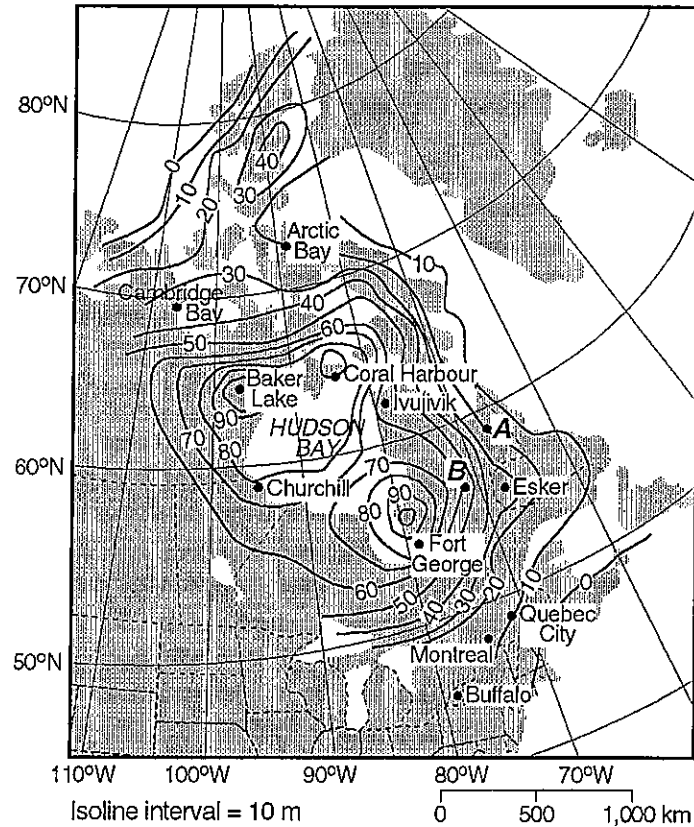


The map below shows the total inches of snowfall received at various locations for the 1984-1985 winter season. On this map, draw the 120-inch snowfall isoline.



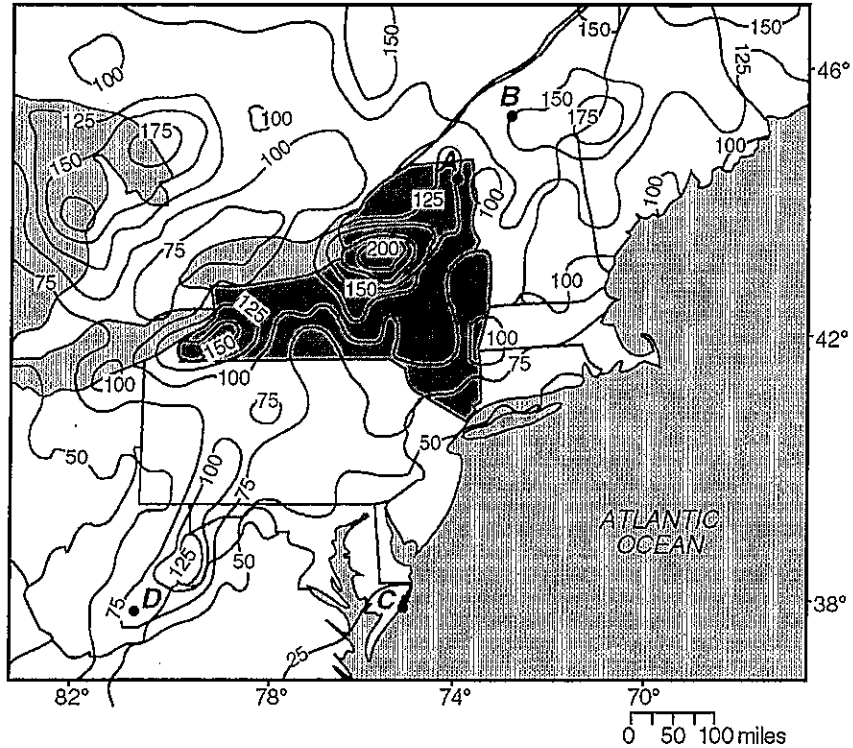
Questions 2 and 3 refer to the following:

The isolines on the map below show the increases in elevation that have occurred since the end of the ice age in this part of North America. *A* and *B* are two points on isolines. Several towns within the area are indicated.



- 2) The land under which town has risen the *most*?
- | | |
|---------------|------------------|
| 1) Arctic Bay | 3) Fort George |
| 2) Baker Lake | 4) Cambridge Bay |
- 3) For which two locations have elevations increased by nearly the same amount?
- | | |
|-----------------------------|---------------------------------|
| 1) Cambridge Bay and Esker | 3) Arctic Bay and Coral Harbour |
| 2) Montreal and Fort George | 4) Ivujivik and Churchill |

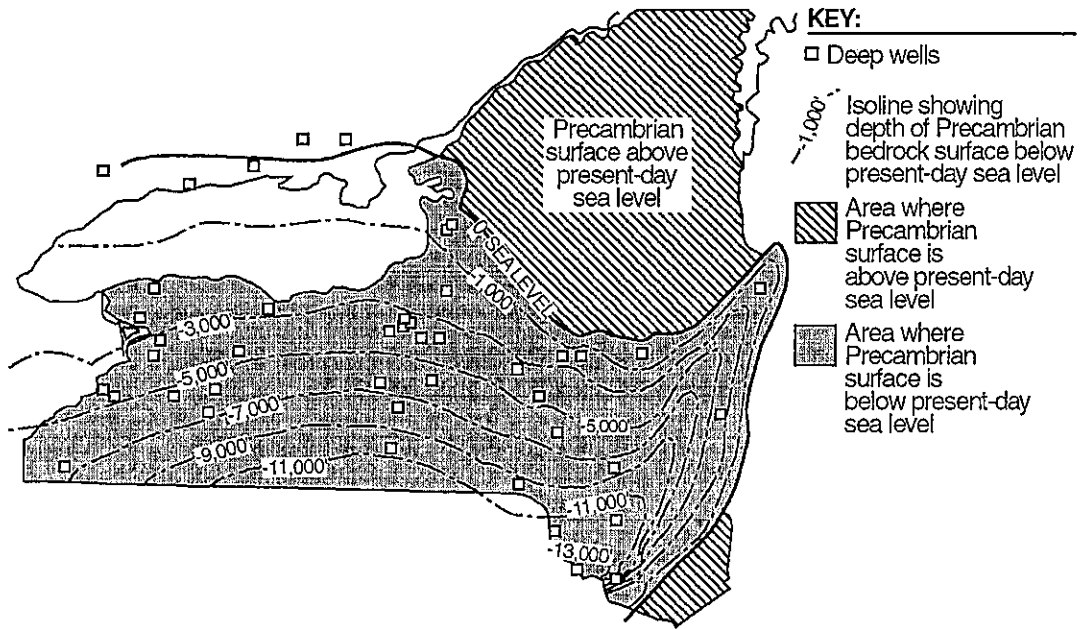
- 4) The map below shows a portion of the eastern United States with New York State shaded. The isolines on the map indicate the average yearly total snowfall, in inches, recorded over a 20-year period. Points A through D are locations on Earth's surface. Latitude and longitude coordinates are shown along the border of the map.



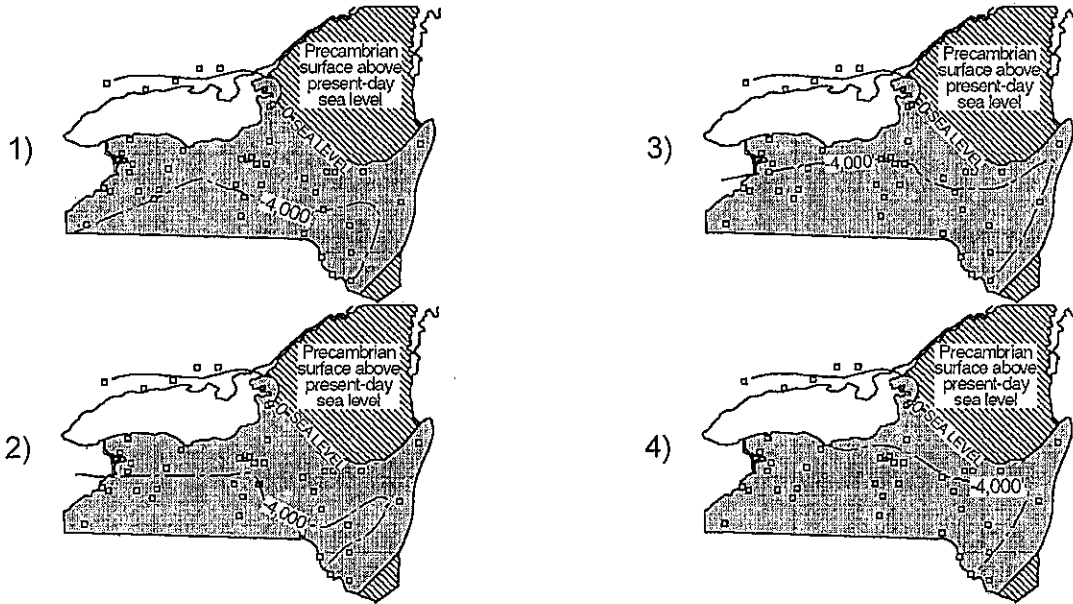
The *greatest* portion of which New York State landscape region averages more than 175 inches of snowfall each year?

- | | |
|---------------------------|-------------------------|
| 1) Atlantic Coastal Plain | 3) Allegheny Plateau |
| 2) Tug Hill Plateau | 4) Adirondack Mountains |

- 5) The map below shows most of New York State. Isolines indicate the depth of the Precambrian bedrock surface below present-day sea level. Depths are in feet.

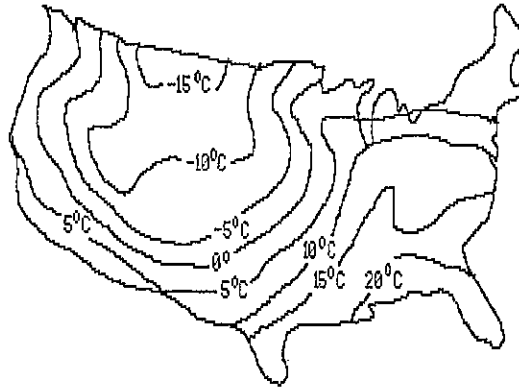


Which map *best* shows the location of the -4,000-foot isoline?



Name: _____
Field Maps (FIELD #3)

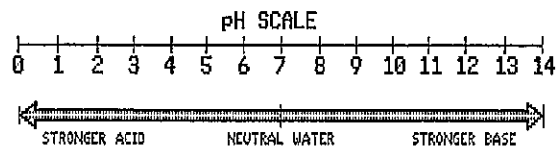
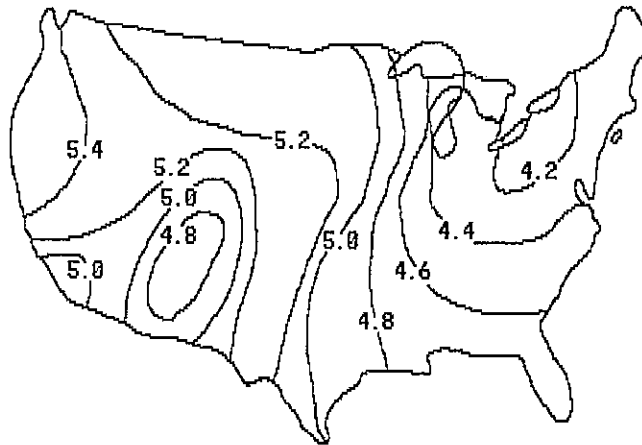
- 1) The United States weather map below shows weather data plotted for a December morning.



The isolines shown on the map most likely are

- | | |
|--------------|-------------------|
| 1) isobars | 3) latitude lines |
| 2) isotherms | 4) contour lines |

- 2) The map below illustrates the distribution of acid rain over the United States on a particular day. The isolines represent acidity measured in pH units.

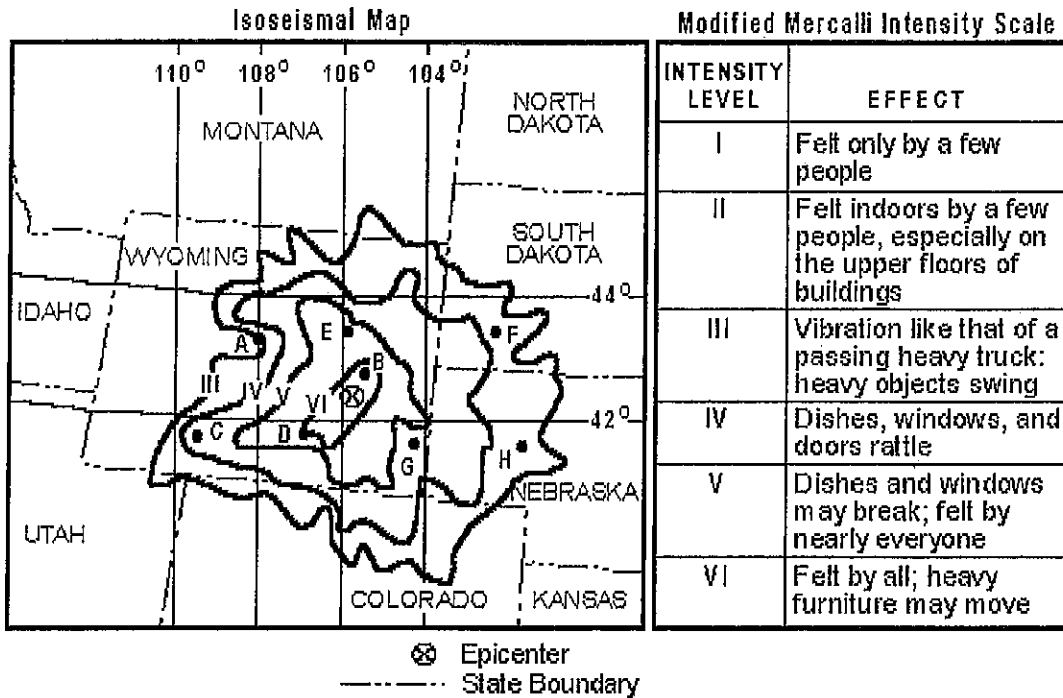


According to the pH scale shown above, which region of the United States has the *greatest* acid rain problem?

- | | | | |
|--------------|--------------|--------------|--------------|
| 1) southwest | 2) southeast | 3) northwest | 4) northeast |
|--------------|--------------|--------------|--------------|

Questions 5 and 6 refer to the following:

The isolines on the isoseismal map below connect points of equal earthquake intensity. Letters A through H represent locations near an earthquake epicenter. The *Modified Mercalli Intensity Scale* below measures the strength of an earthquake in terms of the effects it produces.



- 5) Which state probably had the *least* damage from the earthquake?
- | | |
|-------------|-----------------|
| 1) Nebraska | 3) Colorado |
| 2) Utah | 4) South Dakota |
- 6) At which location would the probability of earthquake damage to windows and dishes be *greatest*?
- | | | | |
|------|------|------|------|
| 1) A | 2) H | 3) E | 4) G |
|------|------|------|------|