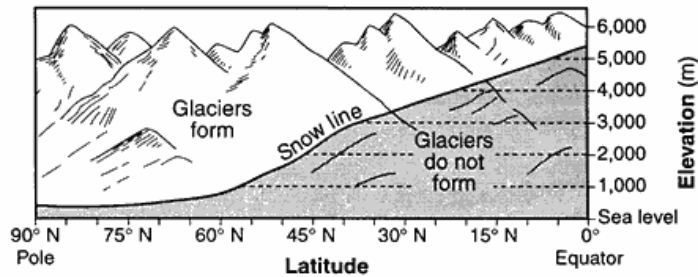


Midterm Review

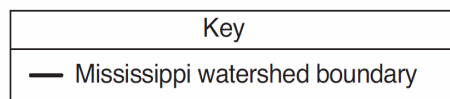
1. The graph below shows the snow line (the elevation above which glaciers form at different latitudes in the Northern Hemisphere).



At which location would a glacier most likely form?

- A) 15° N latitude at an elevation of 4,000 m
 B) 45° N latitude at an elevation of 1,000 m
 C) 30° N latitude at an elevation of 3,000 m
 D) 0° latitude at an elevation of 6,000 m

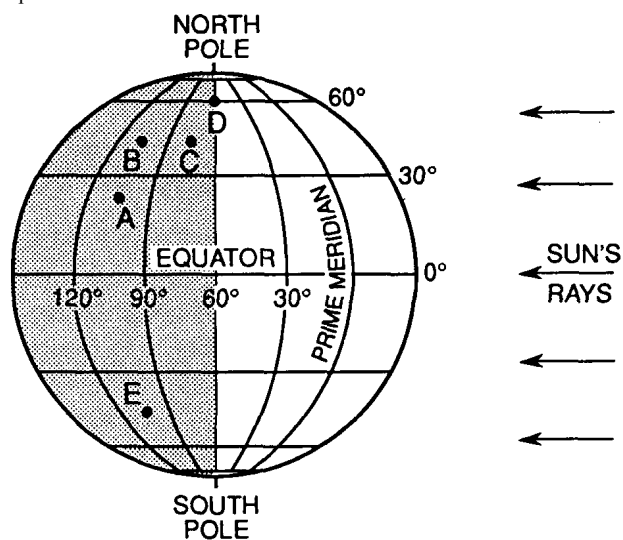
Base your answers to questions 2 through 4 on the map below, which shows a portion of the continent of North America and outlines the Mississippi River watershed. Points *A*, *B*, *C*, *D*, and *E* represent locations on Earth's surface.



2. At which location would the Mississippi River's discharge most likely be the greatest?
- A) *A* B) *B* C) *C* D) *D*
3. Which landform is produced at location *E* where the Mississippi River enters the Gulf of Mexico?
- A) a drumlin B) an outwash plain C) a delta D) an escarpment
4. Sediments deposited by the river at location *B* are best described as
- A) sorted and layered B) sorted and not layered C) unsorted and layered D) unsorted and not layered

Midterm Review

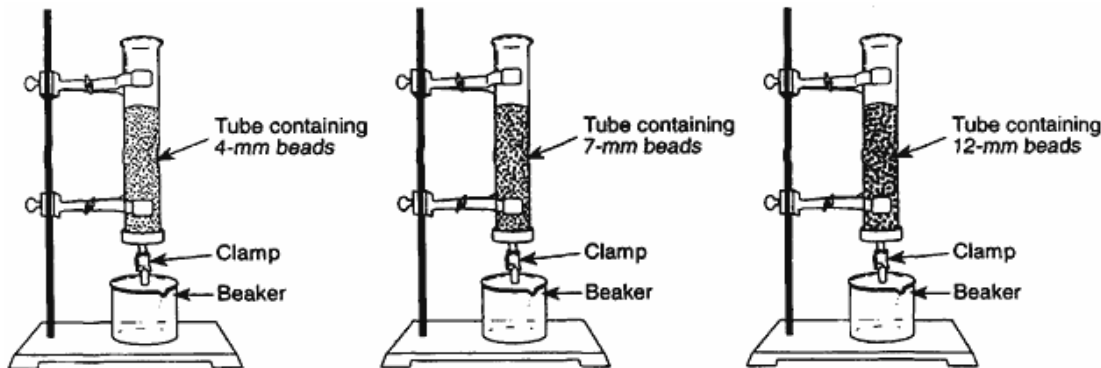
Base your answers to questions 5 and 6 on the diagram of the Earth below. Some of the latitude and longitude lines have been labeled. Points *A* through *E* represent locations on the Earth's surface.



5. What are the approximate latitude and longitude of location *A*?
- A) 105° N, 25° W B) 105° S, 25° E
 C) **25° N, 105° W** D) 25° N, 105° E
6. What do locations *A*, *B*, and *E* have in common?
- A) They have the same prevailing wind direction.
 B) They are at the same latitude.
 C) **They have the same local time.**
 D) They are in the same season.
-
7. Mt. Marcy often has the coldest nighttime temperatures in New York State because of its
- A) latitude and planetary winds **B) latitude and elevation**
 C) longitude and planetary winds D) longitude and elevation

Midterm Review

Base your answers to questions 8 through 12 on the diagram, data and information below. The diagram below represents part of the laboratory setup for an activity to investigate the effects of particle size on permeability, porosity, and water retention. Three separate tubes were used, each containing 300 milliliters of beads of uniform size. Bead sizes were 4 millimeters, 7 millimeters, and 12 millimeters in diameter, respectively.



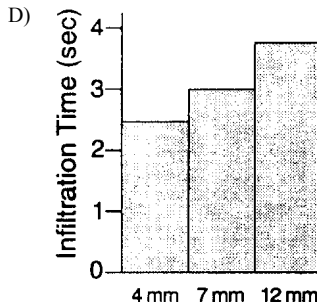
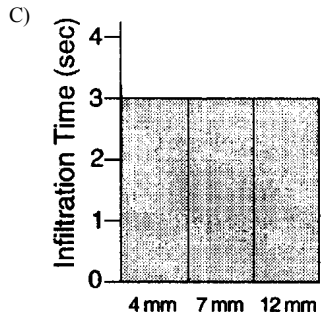
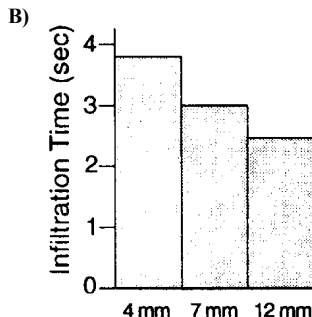
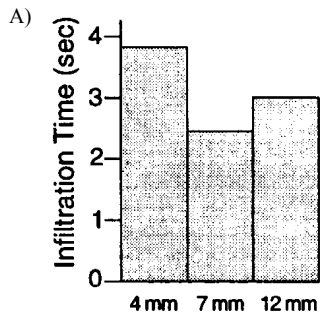
The amount of water added to each tube to cover the beads was determined. The clamp was then removed, the flow of the water was timed, and its volume was measured. Data are shown in the table below. (The amount of water retained on the 7-millimeter beads has been omitted.)

	Particle Size		
	4 mm	7 mm	12 mm
Infiltration Time (seconds)	3.7	3.0	2.4
Amount of Water Needed To Cover All Beads (mL)	147	145	147
Water Recovered from Tube After Clamp Was Removed (mL)	111	123	135
Water Retained on Beads (mL)	36		12

8. Soil composed of which kind of particles would have the longest infiltration time? [Assume that all particles allow some water to pass through.]
- A) sand B) silt C) clay D) pebbles
9. Water can infiltrate loose soil when the soil is
- A) unsaturated and impermeable B) **unsaturated and permeable**
- C) saturated and permeable D) saturated and impermeable

Midterm Review

10. Which graph best represents the infiltration times for these three particle sizes?



11. The data table shows that all three tubes of beads had approximately the same

- A) capillarity B) porosity C) water retention D) permeability time

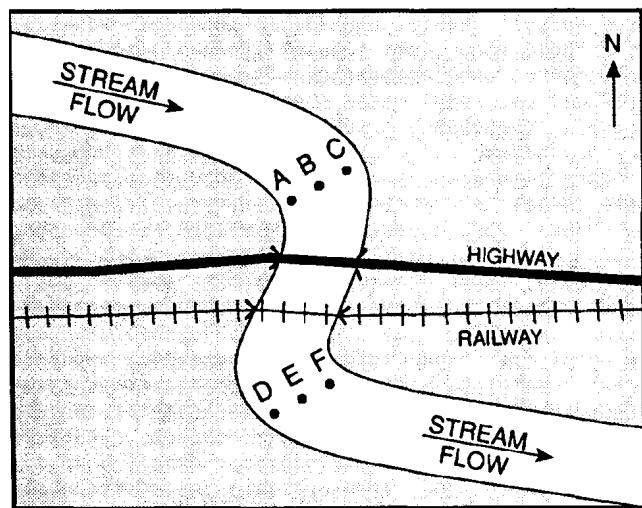
12. What was the total amount of water retained on the 7-millimeter beads after the tubing was unclamped and the water flowed out?

- A) 12 mL B) 36 mL C) 8 mL D) 22 mL

13. When water vapor condenses, how much heat energy will be released into the atmosphere?

- A) 4.18 joules/gram B) 334 joules/gram
C) 2.11 joules/gram D) 2260 joules/gram

Base your answers to questions 14 through 18 on the map below, which represents a meandering stream with a constant gradient. The arrows show the direction of stream flow. Points A through F are locations in the stream.



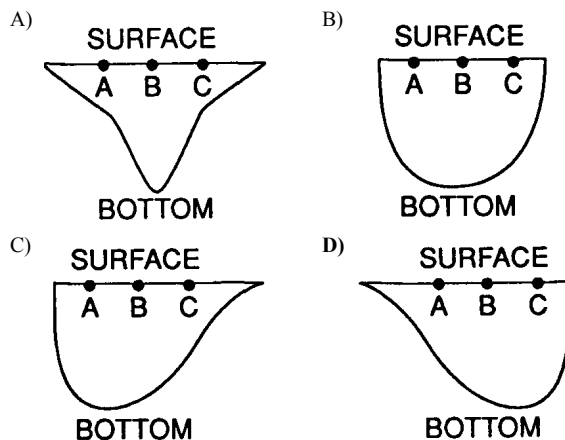
14. At which point would the most material be deposited by the stream?

- A) F B) B C) C D) D

15. With which landscape feature would this meandering stream most likely be associated?

- A) a mountainous area B) a large area of rapids
C) a gently sloping plain D) a canyon

16. Which diagram best represents the cross section of the stream through points A, B, and C?



17. At which point would the stream most likely be flowing fastest?

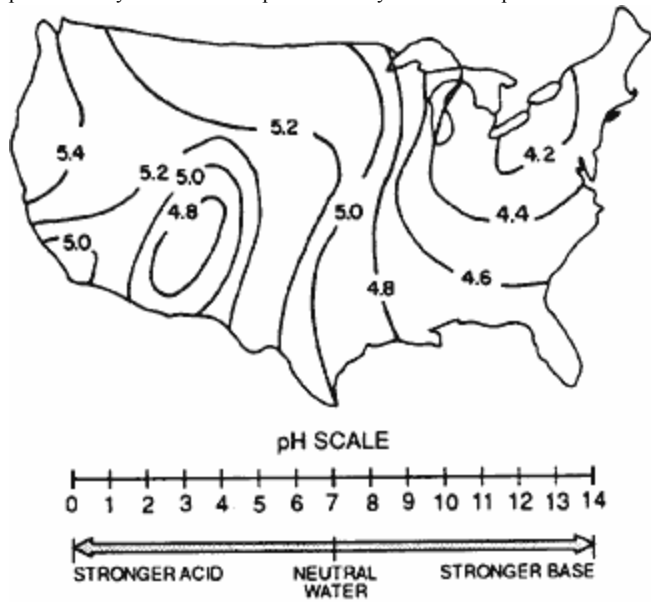
- A) A B) B C) C D) F

18. Which sediment would usually be deposited by the stream first?

- A) silt B) pebbles C) clay D) sand

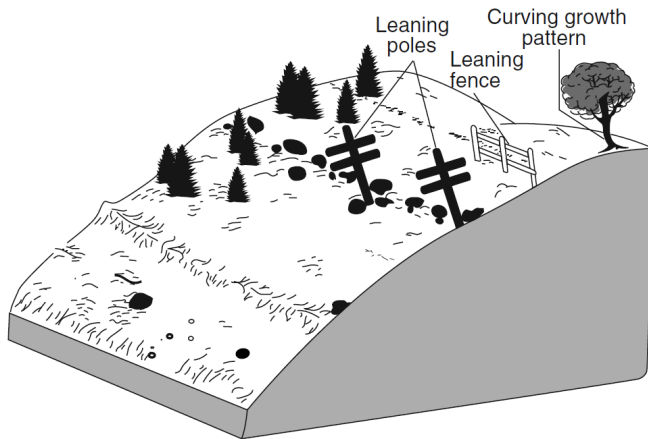
Midterm Review

19. 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 below the map, which region of the United States has the greatest acid rain problem?

- A) northwest **B) northeast** C) southeast D) southwest
20. The diagram below shows the surface features of a landscape.

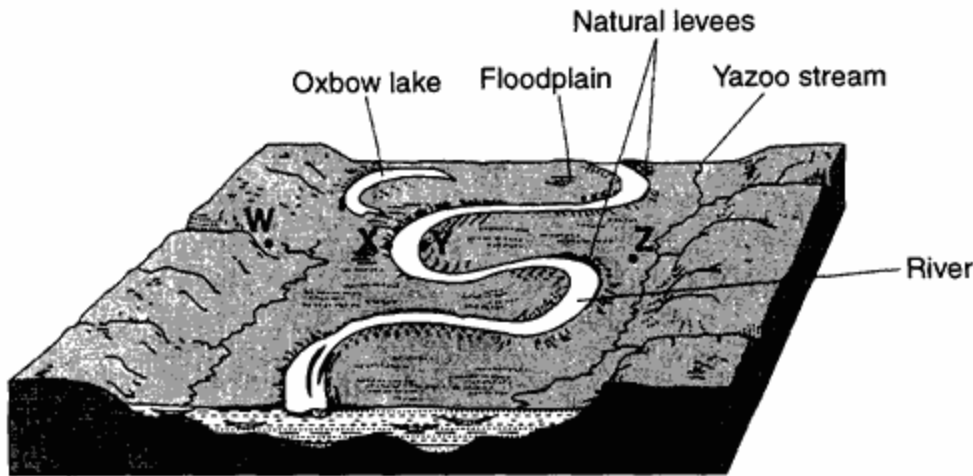


Based on the features shown, which erosional agent had the greatest effect on tree growth and the structures that humans have built on this landscape?

- A) moving ice **B) mass movement**
C) prevailing wind D) running water

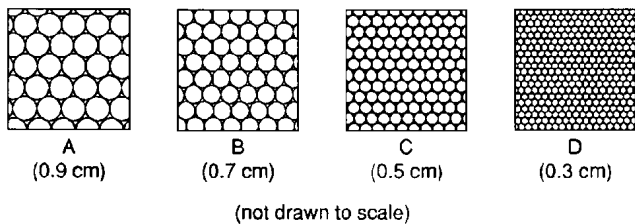
Midterm Review

Base your answers to questions 21 through 23 on the diagram below, which represents the landscape features associated with a meandering river. Letters W, X, Y, and Z represent locations on the floodplain.

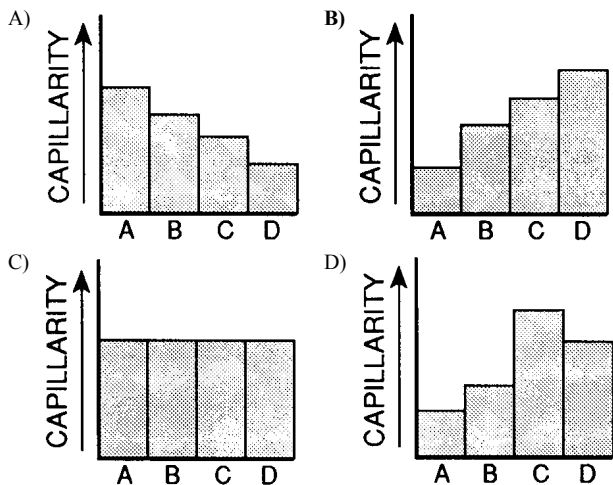


21. Which change would most likely increase the velocity of the river?
- A) an increase in the width of the river B) a decrease in the slope of the river
 C) a decrease in the temperature of the river D) **an increase in the river's discharge**
22. The natural levees are ridges of sediment that slope away from the riverbank toward the floodplain. Which process most likely formed these levees?
- A) **deposition when the river overflowed its banks** B) erosion on the inside curves of the meanders
 C) deposition by the yazoo stream D) weathering of the soil on the riverbanks
23. During transport by this river, a sediment particle will most likely become
- A) more dense B) larger C) heavier D) **more rounded**

24. Base your answer to the following question on the diagrams below, which represent cross sections of four samples of loosely packed, uniformly sorted soil particles. The diameter of the particles is given below each diagram. All soil samples consist of solid spherical particles.

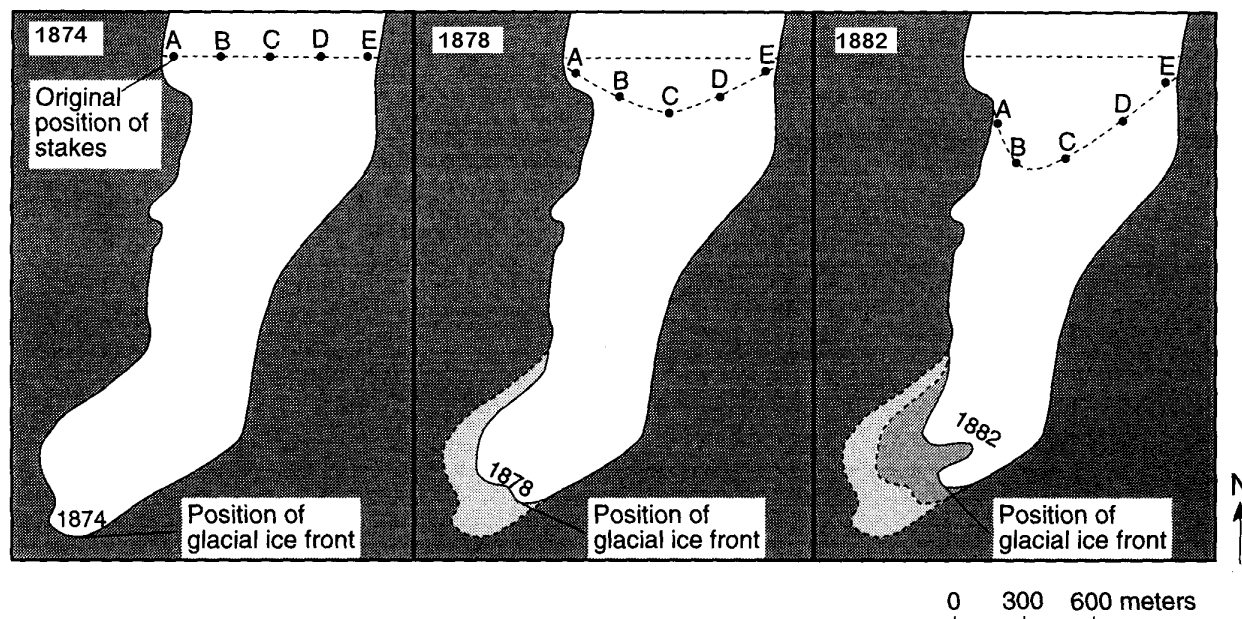


Which graph best represents the capillarity of these soil samples?



Midterm Review

Base your answers to questions 25 and 26 on the three maps below, which show the ice movement and changes at the ice front of an alpine glacier from the years 1874 to 1882. Points A, B, C, D, and E represent the positions of large markers placed on the glacial ice and left there for a period of eight years.



25. Which statement best describes the changes happening to this glacier between 1874 and 1882?

- A) **The ice front was retreating, and the ice within the glacier was advancing.**
- B) The ice front was retreating, and the ice within the glacier was retreating.
- C) The ice front was advancing, and the ice within the glacier was advancing.
- D) The ice front was advancing, and the ice within the glacier was retreating.

26. The changing positions of markers A, B, C, D, and E show that the glacial ice is

- A) slowly becoming thicker
- B) gradually shifting northward
- C) **moving fastest near the middle**
- D) forming smaller crystals

27. The photograph below shows farm buildings partially buried in silt.



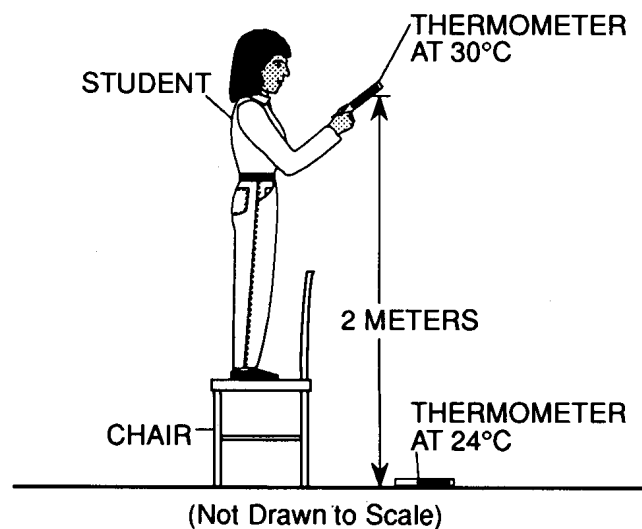
Which erosional agent most likely piled the silt against these buildings?

- A) **wind**
- B) mass movement
- C) ocean waves
- D) glacial ice

28. By which process does water vapor change into clouds?

- A) evaporation
- B) convection
- C) **condensation**
- D) precipitation

29. Base your answer to the following question on In the diagram below, the thermometer held 2 meters above the floor shows a temperature of 30°C. The thermometer on the floor shows a temperature of 24°C.

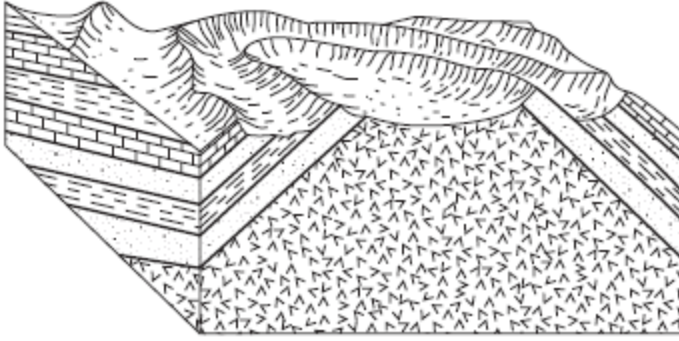


What is the temperature gradient between the two thermometers?

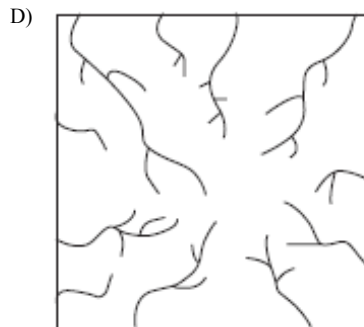
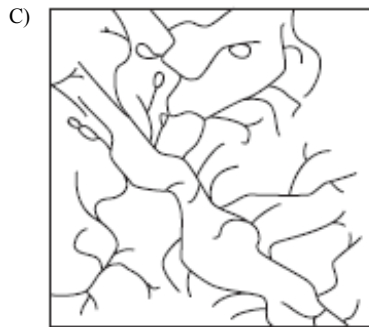
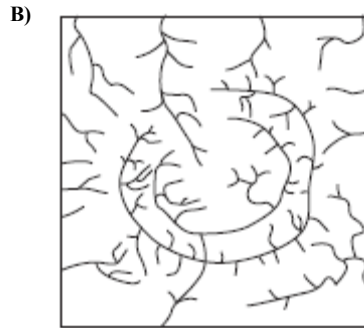
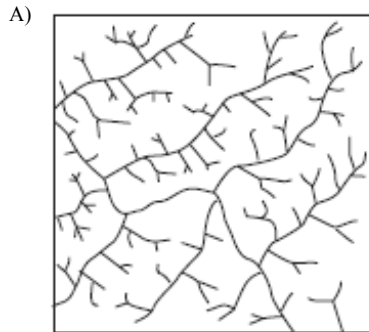
- A) 6° C/m
- B) 2° C/m
- C) **3° C/m**
- D) 4° C/m

Midterm Review

30. The block diagram below represents a deeply eroded dome.



Which map shows the stream drainage pattern that would most likely develop on this deeply eroded dome?



31. The boundaries of landscape regions are generally well defined by changes in

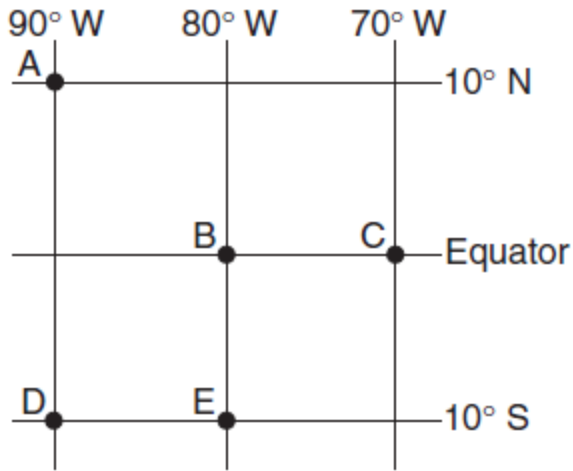
- A) stream size and drainage pattern
- B) elevation and bedrock structure**
- C) latitude and longitude
- D) vegetation and soil type

32. The direction of surface ocean currents is influenced most by

- A) land breezes and sea breezes
- B) planetary winds**
- C) variations in salinity of the water
- D) variations in density of the water

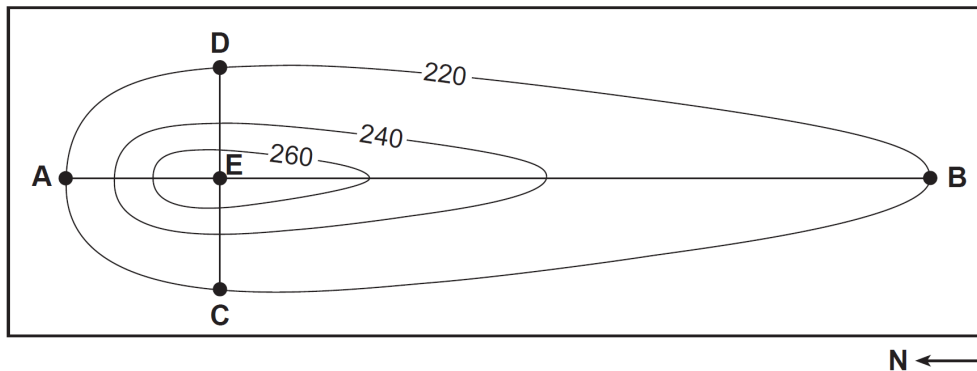
Midterm Review

Base your answers to questions 33 and 34 on the map below, which shows the latitude and longitude of five observers, *A*, *B*, *C*, *D*, and *E*, on Earth.



33. What is the altitude of *Polaris* (the North Star) above the northern horizon for observer *A*?
- A) 10° B) 0° C) 80° D) 90°
34. Which two observers would be experiencing the same apparent solar time?
- A) *D* and *E* B) *B* and *C* C) ***B* and *E*** D) *A* and *C*
-
35. Base your answer to the following question on the contour map below, which shows a hill formed by glacial deposition near Rochester, New York. Letters *A* through *E* are reference points. Elevations are in feet.

Contour Map

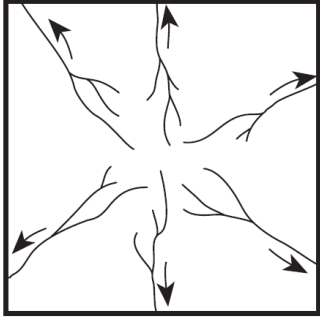


Which description best compares the gradients of this hill?

- A) ***AE* has a steeper gradient than *EB*.** B) *CE* has a steeper gradient than *ED*.
- C) *CE* and *AE* have the same gradient. D) *AE* and *EB* have the same gradient.

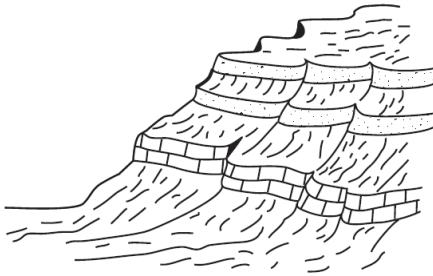
Midterm Review

36. The map below shows a stream drainage pattern. Arrows show the direction of stream flow.

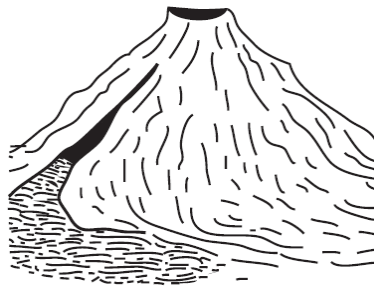


On which landscape region did this drainage pattern most likely develop?

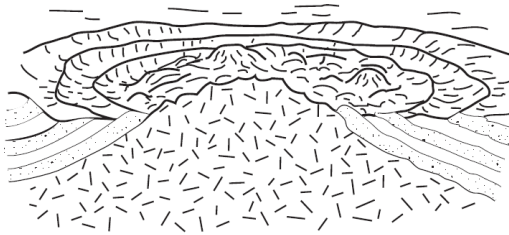
A)



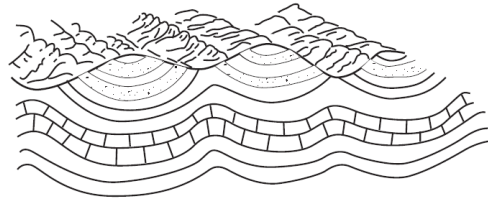
B)



C)



D)



37. A landslide is an example of

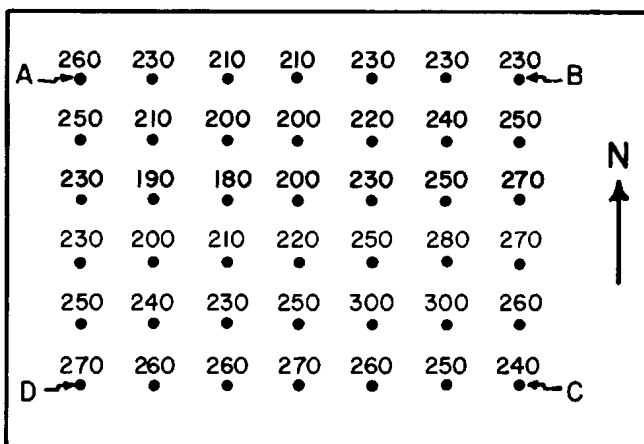
- | | |
|-------------------------|------------------------|
| A) mass movement | B) river deposition |
| C) glacial scouring | D) chemical weathering |

38. The formation of soil is primarily the result of

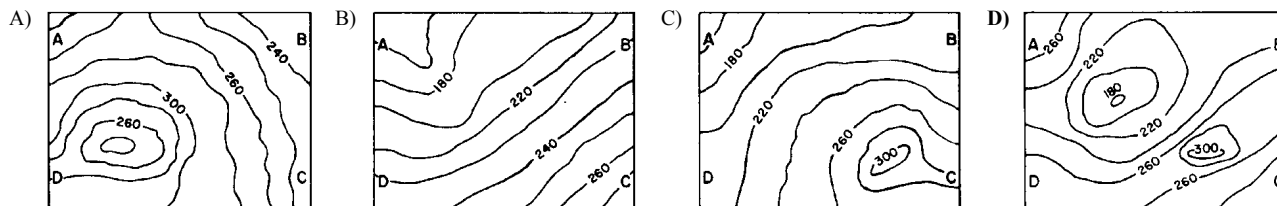
- A) stream deposition and runoff
B) weathering and biological activity
 C) stream erosion and mass movement
 D) precipitation and wind erosion

Midterm Review

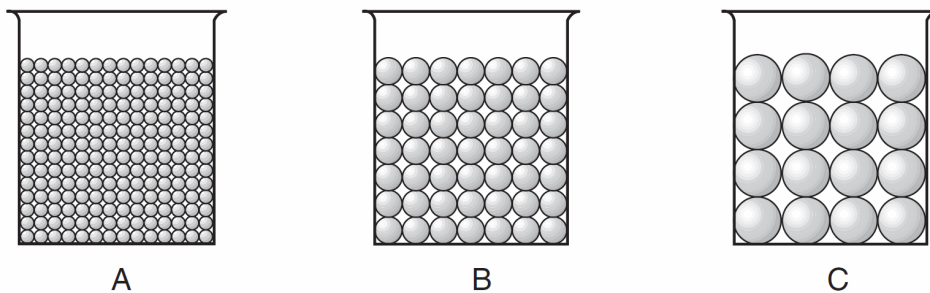
39. Base your answer to the following question on the diagram below which represents the elevation data for a certain landscape region. Points *A*, *B*, *C*, and *D* are specific locations on the surface of this landscape.



Which diagram best represents the location of the isolines for the elevation field of this landscape?



40. The cross sections below represent three beakers that were used to test porosity. Beakers *A*, *B*, and *C* each contain a different size of bead. Each beaker holds an equal volume of beads. The amount of water needed to fill the total pore space between the beads in each beaker was measured.



Which statement best describes the porosity that was found for these three samples?

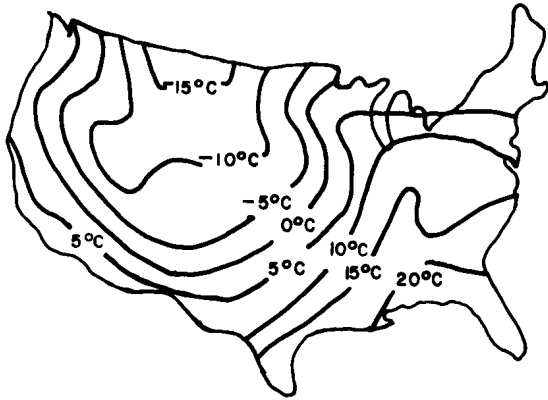
- A) *A* had a greater porosity than *B* and *C*.
- B) *B* had a greater porosity than *A* and *C*.
- C) *C* had a greater porosity than *A* and *B*.
- D) All three samples had the same porosity.

41. Which process requires water to gain 2260 Joules of energy per gram?

- A) condensation
- B) vaporization
- C) melting
- D) freezing

Midterm Review

42. Base your answer to the following question on The United States weather map below shows weather data plotted for a December morning.



The isolines shown on the map most likely are

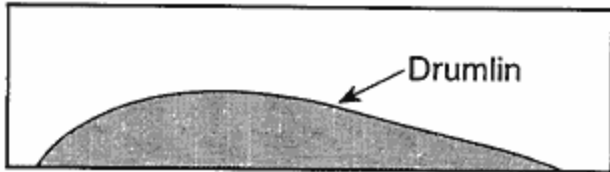
- A) latitude lines
- B) contour lines
- C) **isotherms**
- D) isobars

43. The diagram below shows the isolines of air pressure around a low-pressure center. On which side of the low-pressure center will the wind speed be greatest?



- A) south
- B) north
- C) **east**
- D) west

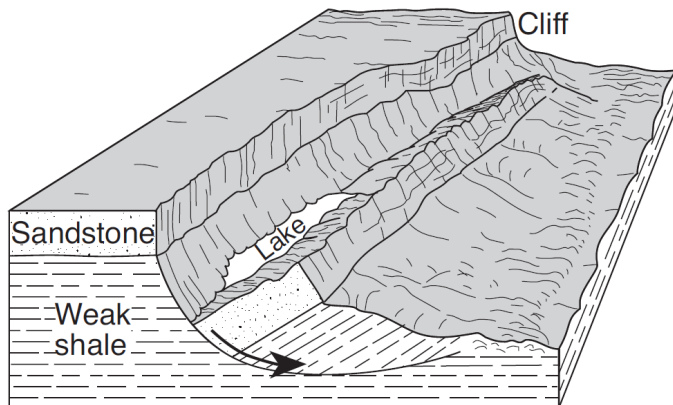
44. The diagram below represents a side view of a hill (drumlin) that was deposited by a glacier on the Atlantic coast.



This hill is most likely composed of

- A) **unsorted sediments**
- B) horizontally layered sediments
- C) cemented sediments
- D) vertically layered sediments

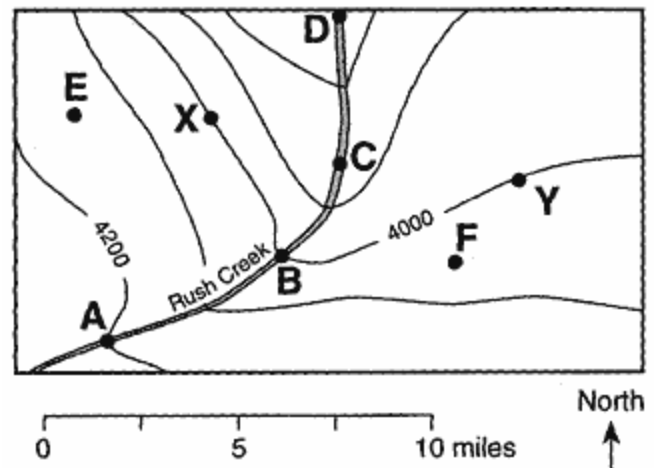
45. The block diagram below shows a displacement of rock layers.



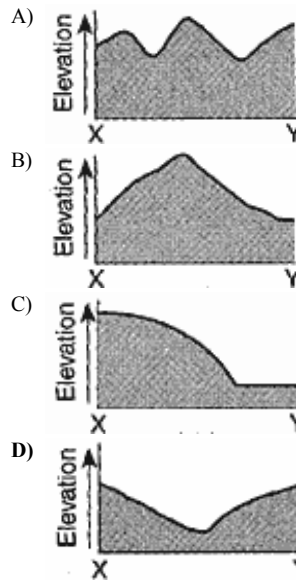
Which process describes the downward sliding of the rock material?

- A) lava flow
- B) **mass movement**
- C) glacial erosion
- D) tidal changes

Base your answers to questions 46 through 50 on the topographic map below. Points A, B, C, D, E, F, X, and Y are locations on the map. Elevation is measured in feet.

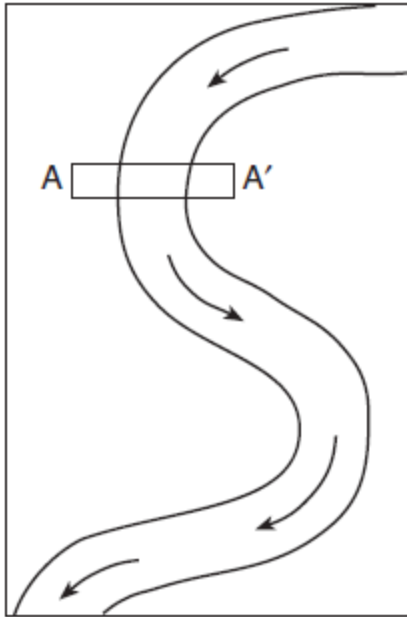


- 46. The gradient between points A and B is closest to
 - A) **40 ft/mi**
 - B) 20 ft/mi
 - C) 80 ft/mi
 - D) 200 ft/mi
- 47. Which locations have the greatest difference in elevation?
 - A) **A and D**
 - B) B and X
 - C) C and F
 - D) E and Y
- 48. Between points C and D, Rush Creek flows toward the
 - A) west
 - B) east
 - C) south
 - D) **north**
- 49. What is the contour interval used on this map?
 - A) 200 ft
 - B) 50 ft
 - C) 20 ft
 - D) **100 ft**
- 50. Which diagram best represents the profile along a straight line between points X and Y?



Midterm Review

51. The map below shows a meandering river. *A-A'* is the location of a cross section. The arrows show the direction of the river flow.



Which cross section best represents the shape of the river bottom at *A-A'*?

- A)

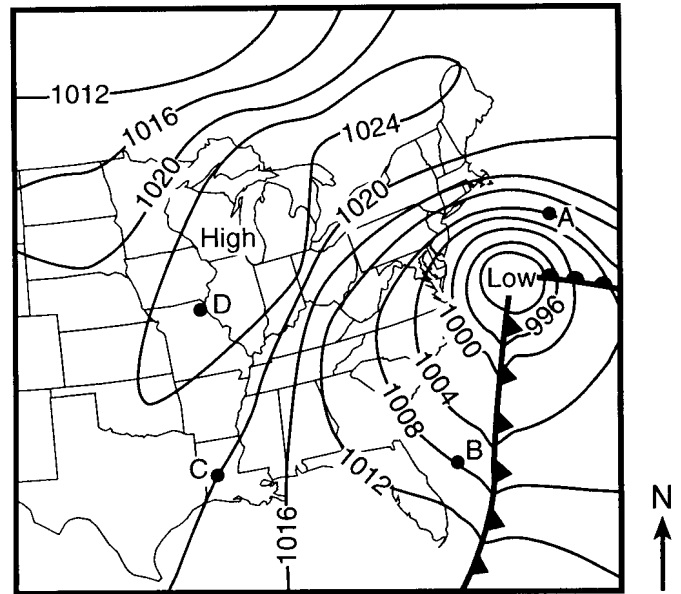
A 3D block diagram showing a cross-section of a riverbed. The riverbed is a dashed line forming a U-shape that is deeper on the outer bank (right side) and shallower on the inner bank (left side). The banks are solid lines.
- B)

A 3D block diagram showing a cross-section of a riverbed. The riverbed is a dashed line forming a symmetric U-shape. The banks are solid lines.
- C)

A 3D block diagram showing a cross-section of a riverbed. The riverbed is a dashed line forming a U-shape that is deeper on the inner bank (left side) and shallower on the outer bank (right side). The banks are solid lines.
- D)

A 3D block diagram showing a cross-section of a riverbed. The riverbed is a dashed line forming a U-shape that is deeper on the outer bank (right side) and shallower on the inner bank (left side). The banks are solid lines.

52. Base your answer to the following question on the weather map below. Points *A*, *B*, *C*, and *D* are locations on Earth's surface.

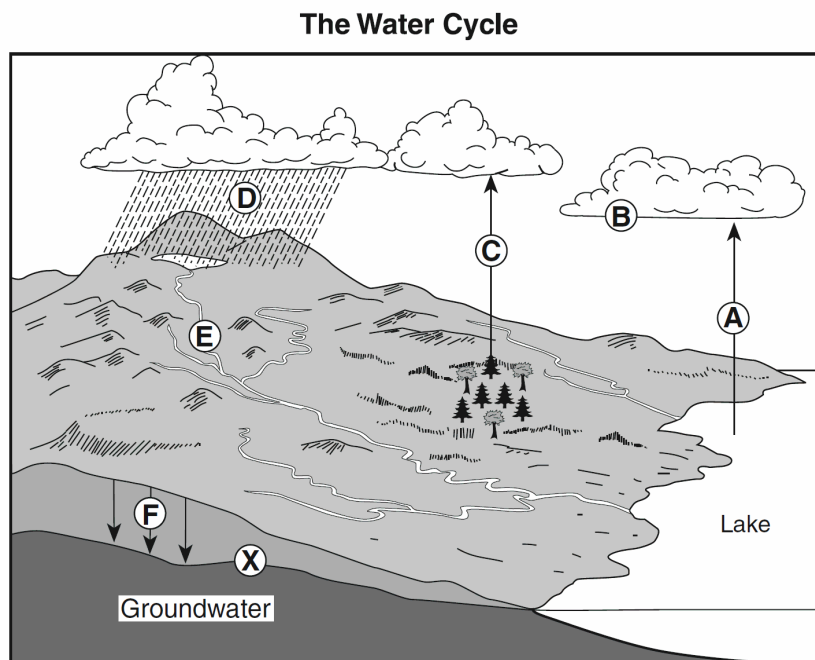


The isolines on the map represent values of air

- A) temperature
- B) density
- C) pressure
- D) humidity

Midterm Review

53. Base your answer to the following question on the diagram below, which shows a model of the water cycle. Letters *A* through *F* represent some processes of the water cycle. Letter *X* indicates the top of the underground zone that is saturated with water.

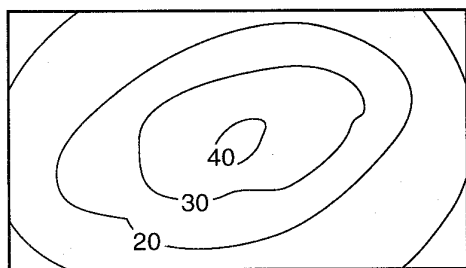


(Not drawn to scale)

Which process is represented by letter *F*?

- A) capillarity B) condensation C) vaporization **D) infiltration**

54. Base your answer to the following question on Isolines on the map below show elevations above sea level, measured in meters.

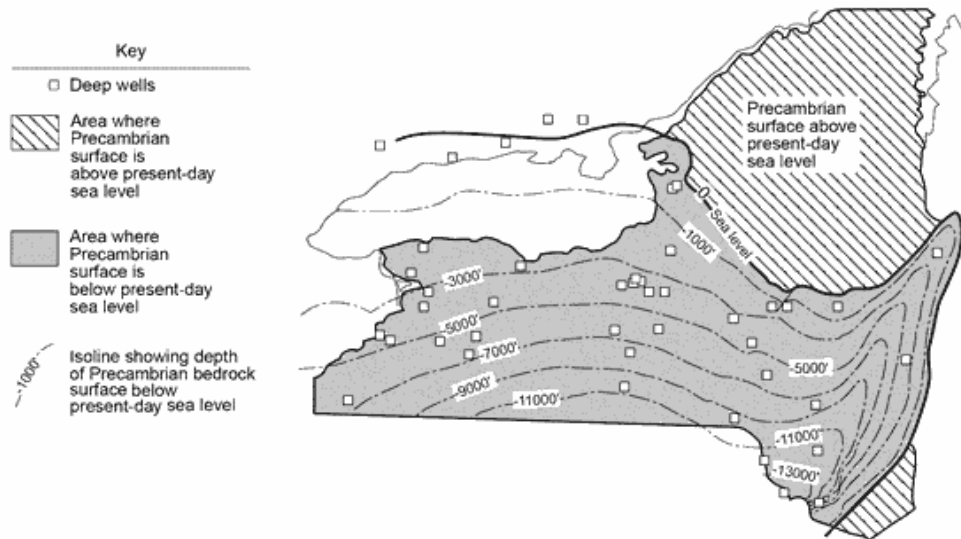


What is the highest possible elevation represented on this map?

- A) 49 m B) 41 m C) 51 m D) 39 m

Midterm Review

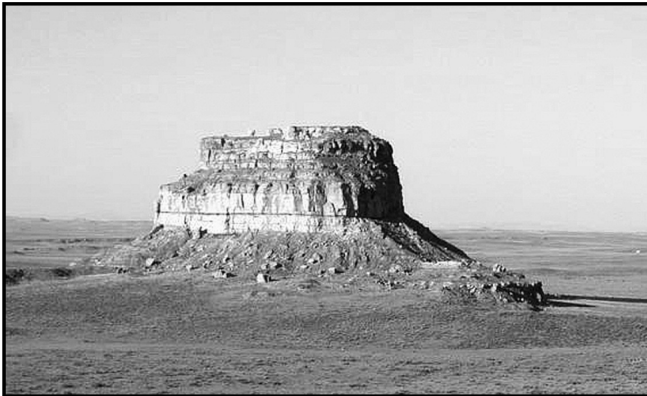
55. Base your answer to the following question on the map below, which shows most of New York State. Isolines indicate the depth of the Precambrian bedrock surface below present-day sea level. Depths are in feet.



According to the map, in which two present-day New York State landscape regions is the most Precambrian bedrock likely to be exposed on the land surface?

- A) Allegheny Plateau and Catskills
 B) Erie-Ontario Lowlands and Tug Hill Plateau
 C) **Adirondack Mountains and Hudson Highlands**
 D) Hudson-Mohawk Lowlands and Champlain Lowlands

56. The photography below shows a sandstone butte in an arid region.

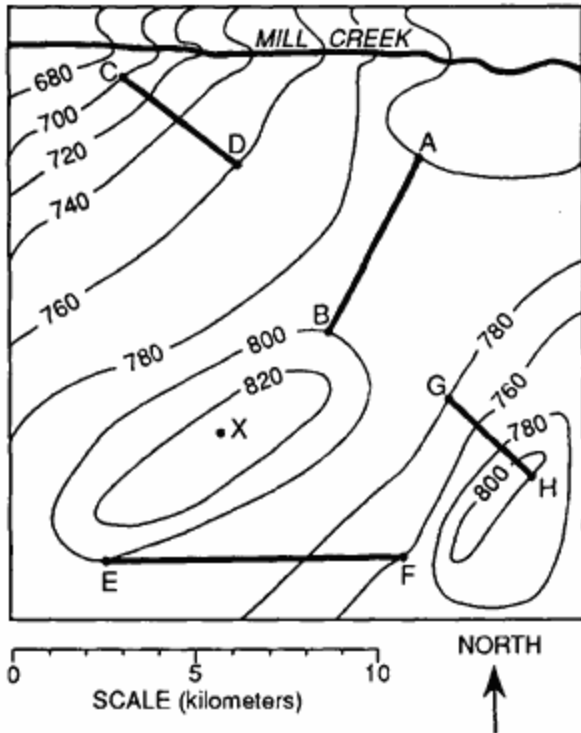


Which agents of erosion are currently changing the appearance of this butte?

- A) wave action and running water **B) wind and mass movement**
 C) running water and glacier D) glaciers and mass movement
57. Which landscape region separates the Adirondack Mountains from the Catskills?
- A) **Hudson-Mohawk Lowlands** B) Champlain Lowlands
 C) Tug Hill Plateau D) Taconic Mountains

Midterm Review

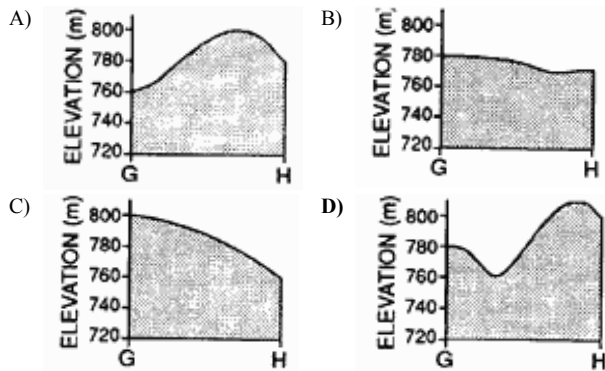
Base your answers to questions 58 and 59 on the topographic map below, which represents elevation contours measured in meters. Four straight lines, *AB*, *CD*, *EF*, and *GH*, have been drawn for reference purposes.



58. What could be the elevation of point *X*?

- A) 819 m **B) 826 m** C) 850 m D) 841 m

59. Which profile below most likely represents cross section *GH*?



Midterm Review

60. The photograph below shows the results of a landslide.



This landslide is an example of

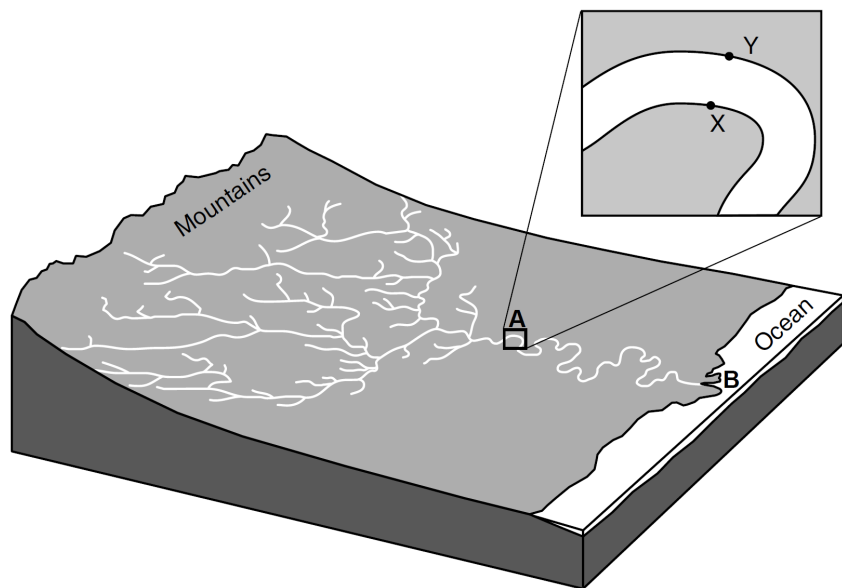
- A) glacial deposition B) wind abrasion **C) mass movement** D) wave action
-

61. Which soil conditions normally result in the greatest amount of runoff?

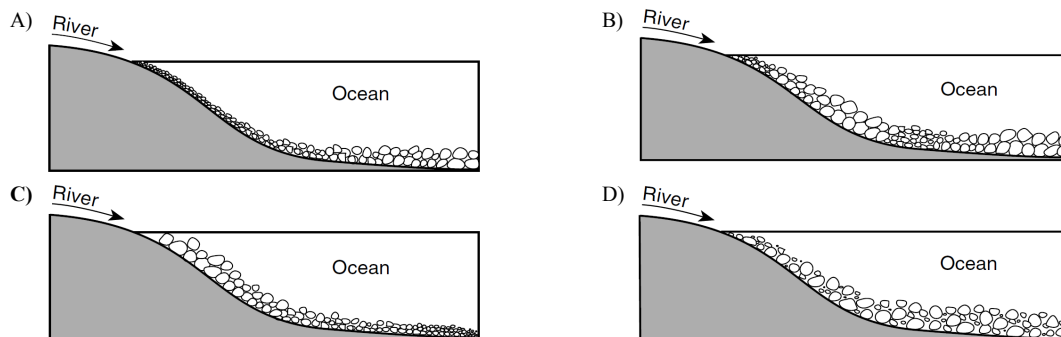
- A) high permeability and steep slope
B) high permeability and gentle slope
C) low permeability and gentle slope
D) low permeability and steep slope

Midterm Review

Base your answers to questions 62 through 64 on the block diagram below and on your knowledge of Earth science. The block diagram represents a river drainage system. A portion of the river, seen in box *A*, has been enlarged. Points *X* and *Y* are on opposite sides of the river. Letter *B* indicates the location where the river enters the ocean.



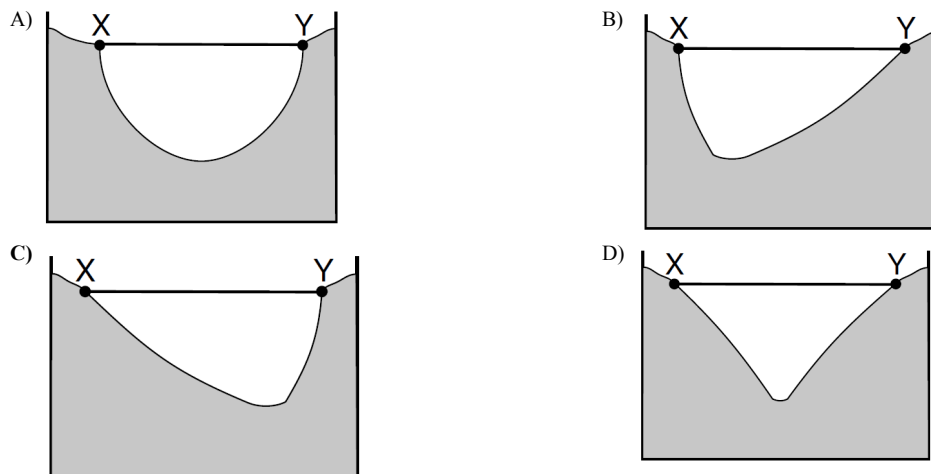
62. Which cross section represents the most likely pattern of sediments deposited where the river enters the ocean at location *B*?



63. The area of land drained by this river and its tributaries is best described as the river's

- A) water table **B) watershed** C) floodplain D) topography

64. Which cross section best represents the profile of the bottom of the river between points *X* and *Y* at location *A*?

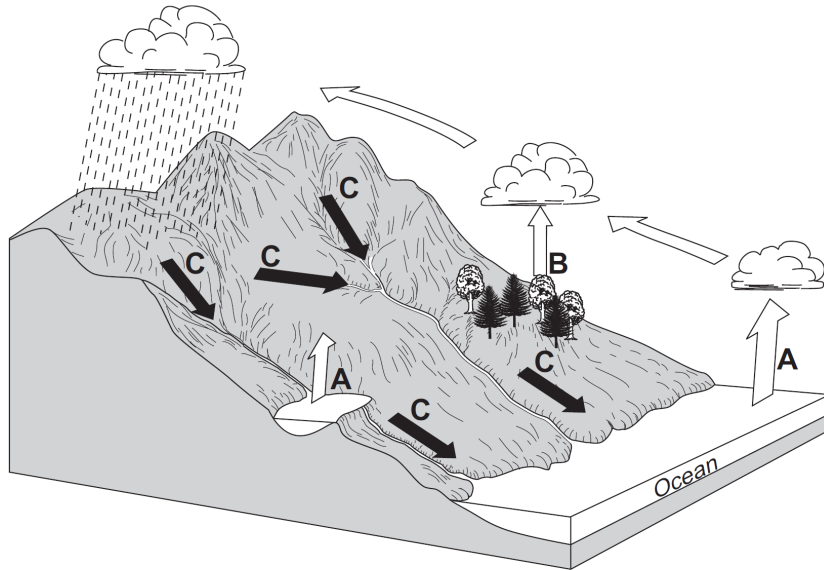


Midterm Review

65. A soil sample with a large amount of space between the particles will have a

- A) low permeability rate
- B) **high porosity**
- C) low infiltration rate
- D) high capillarity

66. Base your answer to the following question on the diagram below and on your knowledge of Earth science. The diagram represents the water cycle. Letters *A* through *C* represent different processes in the water cycle.



(Not drawn to scale)

Which process is represented by letter *B*?

- A) capillarity
- B) infiltration
- C) **transpiration**
- D) precipitation

67. The diagrams below represent four different examples of one process that transports sediments.

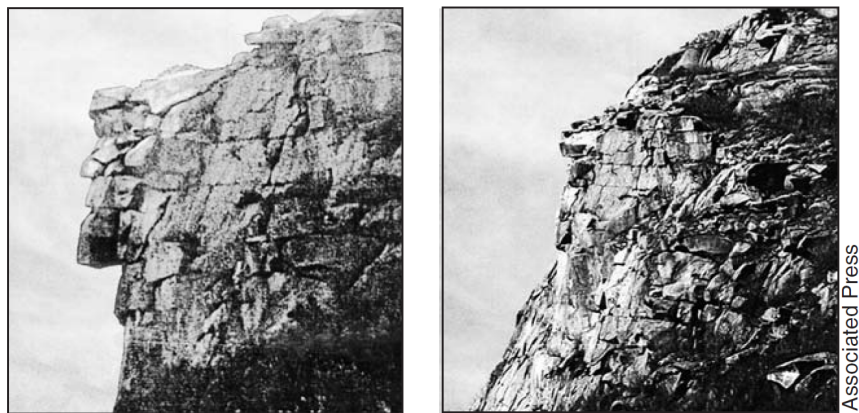
<p>Soil creep</p> <p>Gradual downhill movement of soil</p>	<p>Debris flow</p> <p>Rapid downslope flow of debris</p>	<p>Mud flow</p> <p>Downward flow of fine particles (mud) and large amounts of water</p>	<p>Rock fall</p> <p>Rapid falling of pieces of rock from a cliff or steep slope</p>
--	--	---	---

Which process is shown in these diagrams?

- A) **mass movement**
- B) chemical weathering
- C) rock abrasion
- D) wind action

Midterm Review

68. Base your answer to the following question on the photographs and news article below.



Granite profile of the Old Man of the Mountain is shown before the collapse, and after

Old Man's Loss Felt in New Hampshire

FRANCONIA, N.H. — Crowds of visitors were drawn to Franconia Notch on Sunday to mourn the loss of New Hampshire's well-known symbol — the Old Man of the Mountain granite profile.

The 700-ton natural formation was just a pile of rocks after breaking loose from its 1,200-foot-high mountainside perch. It was unclear when the outcropping fell because clouds had obscured the area Thursday and Friday; a state park trail crew discovered the collapse Saturday morning.

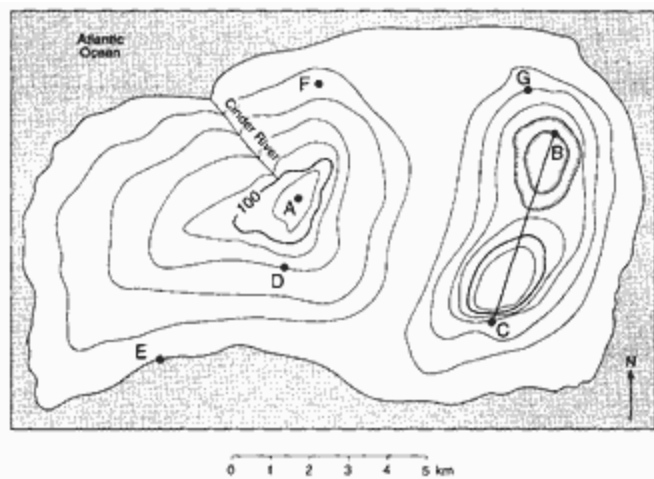
The famous mountain's history dates millions of years. Over time, nature carved out a 40-foot-tall profile resembling an old man's face, and it eventually became New Hampshire's most recognizable symbol.

The Buffalo News, May 5, 2003

Which agent of erosion is most likely responsible for the collapse of the granite profile?

- A) running water B) glacial ice C) mass movement D) wave action

69. Base your answer to the following question on the contour map of an island below. Points *A* through *G* represent locations on the island. Elevations are in meters.

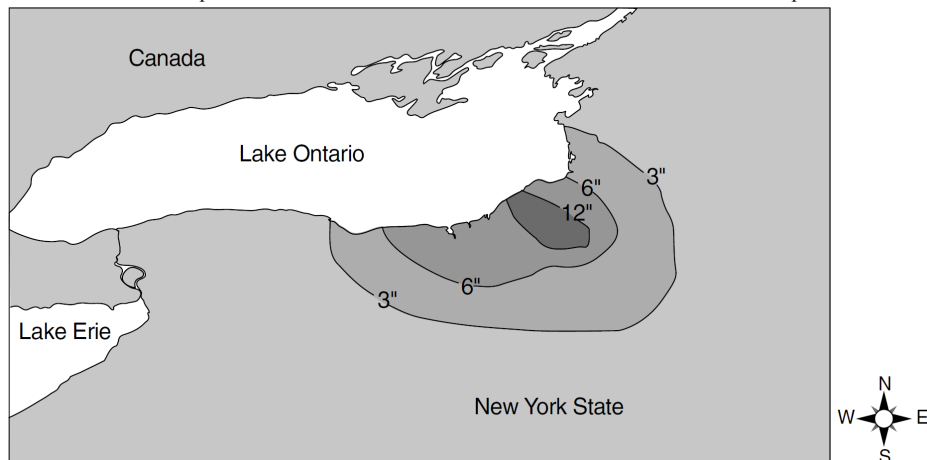


Which two points have the same elevation?

- A) *G* and *F* B) *B* and *D* C) *C* and *D* D) *G* and *C*

Midterm Review

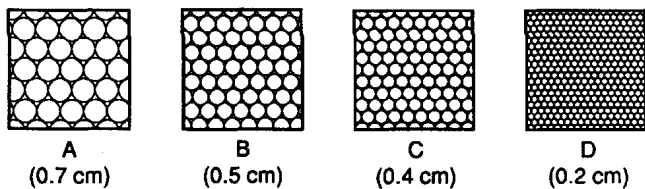
70. The isolines on the map below show snowfall totals from a lake-effect storm that affected a portion of New York State.



The surface winds that produced this storm came from which direction?

- A) southwest B) southeast C) **northwest** D) northeast

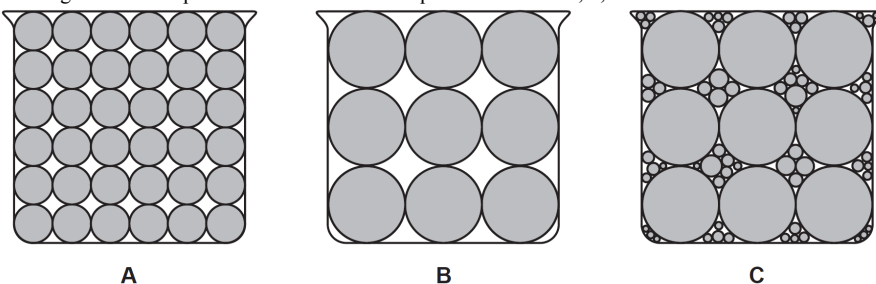
71. Base your answer to the following question on the diagrams below, which represent cross sections of four samples of loosely packed, uniformly sorted soil particles. The diameter of the particles is given below each diagram. All soil samples consist of solid spherical particles.



Sample *D* will have the greatest capillarity because it

- A) is the most loosely packed **B) has the smallest particles**
 C) is weathering the most rapidly D) has the smallest surface area

72. The diagram below represents cross sections of equal-size beakers *A*, *B*, and *C* filled with beads.



Which statement best compares the porosity in the three beakers?

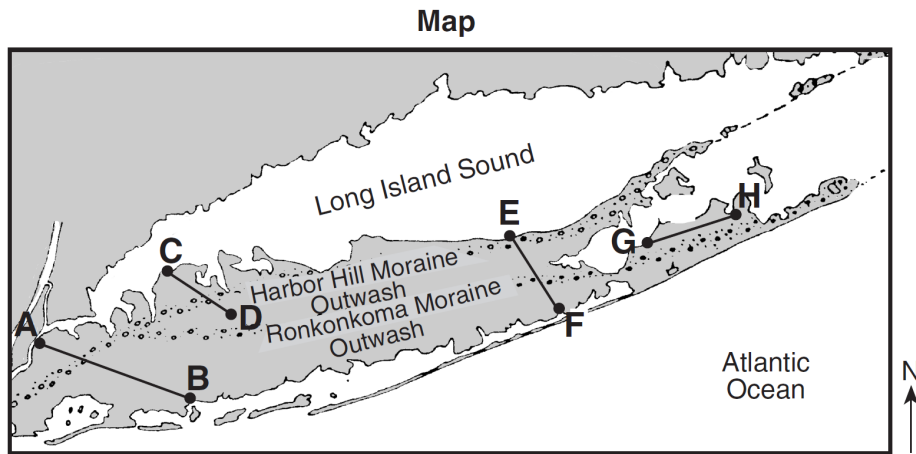
- A) Beaker *A* and beaker *B* have the same porosity, and beaker *C* has the greatest porosity.
 B) Beaker *C* has the greatest porosity, beaker *B* has less porosity, and beaker *A* has the least porosity.
 C) Beaker *B* has the greatest porosity, beaker *A* has less porosity, and beaker *C* has the least porosity.
D) Beaker *A* and beaker *B* have the same porosity, and beaker *C* has the least porosity.

73. The Catskills are part of which type of landscape region?

- A) **plateau** B) plain
 C) mountain D) coastal lowland

Midterm Review

74. Base your answer to the following question on the map of Long Island, New York. *AB*, *CD*, *EF* and *GH* are reference lines on the map.



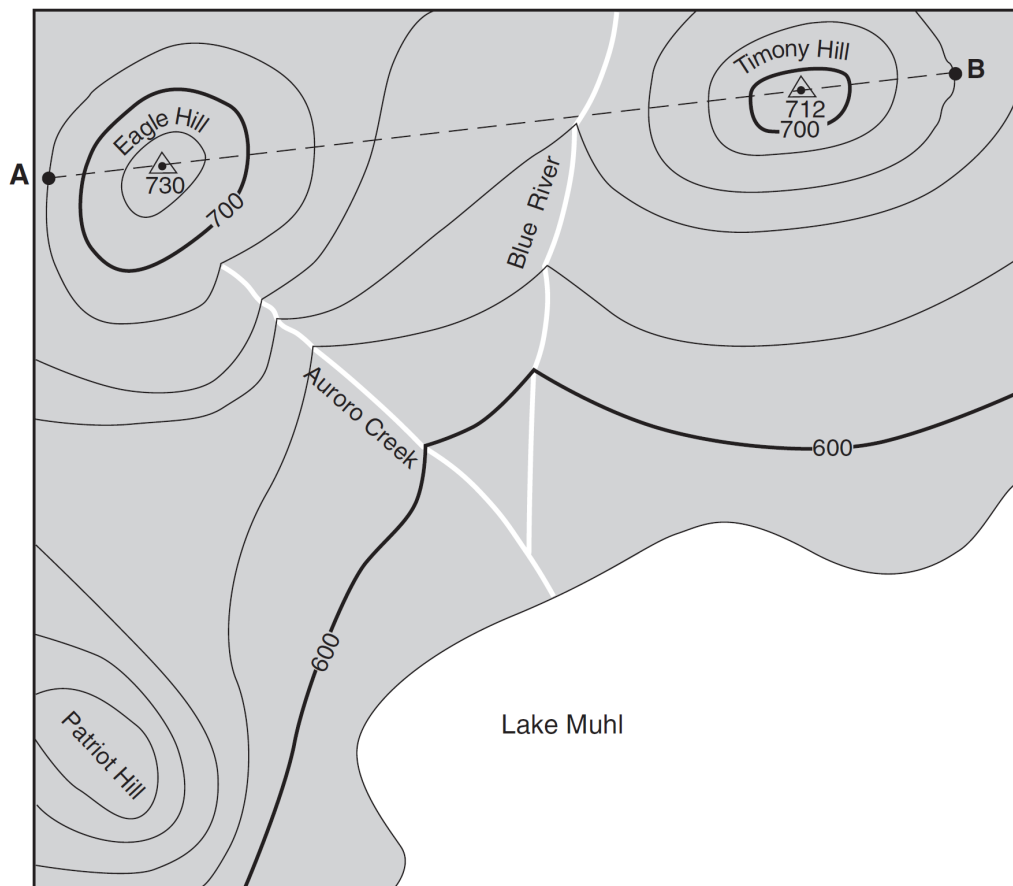
Which agent of erosion transported the sediments that formed the moraines shown on the map?

- A) wind
- B) ice
- C) water
- D) mass movement

Midterm Review

75. Base your answer to the following question on the topographic map below. Points *A* and *B* are reference points on the map. The Δ symbols show the highest elevations on Eagle Hill and Timony Hill. Elevations are shown in feet.

Topographic Map



Contour interval = 20 feet

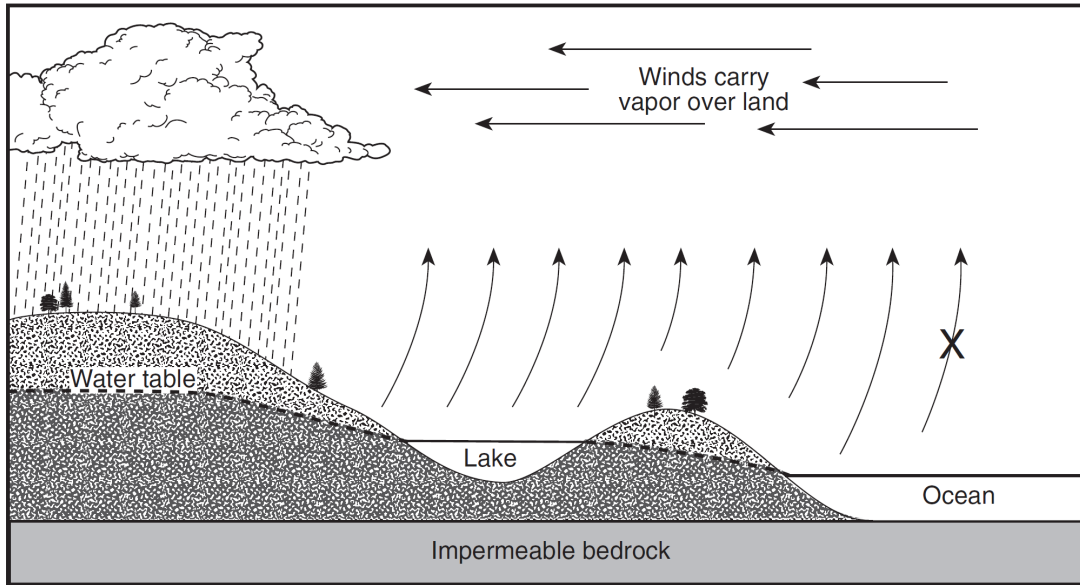
0 2 4 6 miles



State a possible elevation of the top of Patriot Hill.

Midterm Review

Base your answers to questions 76 and 77 on cross section below, which shows the general pattern of water movement in the water cycle. Letter X represents a water-cycle process.

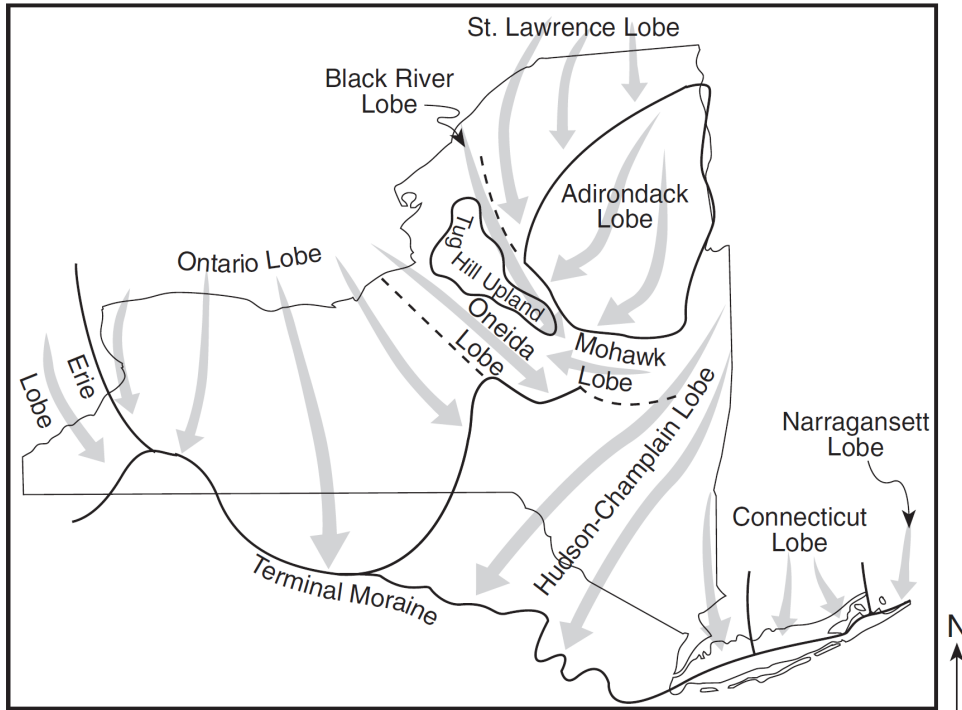


76. What process of the water cycle is represented by X?

77. Describe *one* surface condition that would allow runoff to occur.

Midterm Review

78. Base your answer to the following question on the map below, which shows the different lobes (sections) of the Laurentide Ice Sheet, the last continental ice sheet that covered most of New York State. The arrows show the direction that the ice lobes flowed. The terminal moraine shows the maximum advance of this ice sheet.



Describe the arrangement of rock material in the sediments that were directly deposited by the glacier.

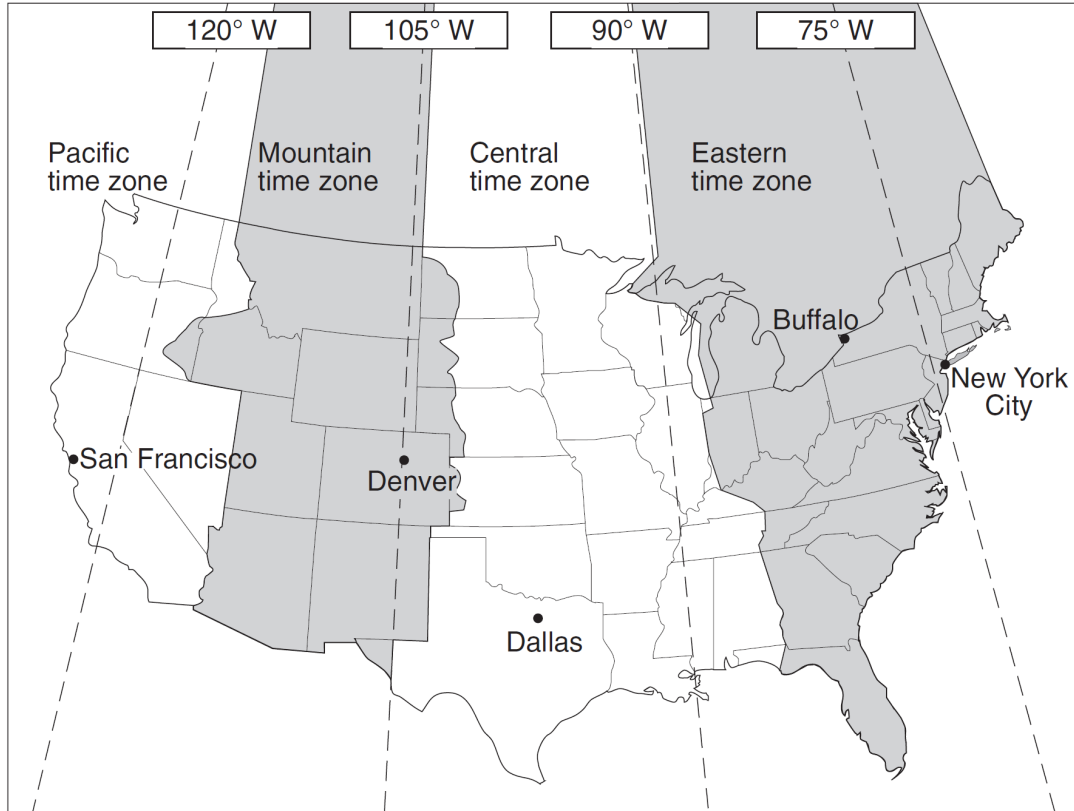
79. Part of which generalized New York State landscape region is drained by the Susquehanna River and its tributaries?

Midterm Review

80. Base your answer to the following question on passage and time zones map shown below.

Time Zones

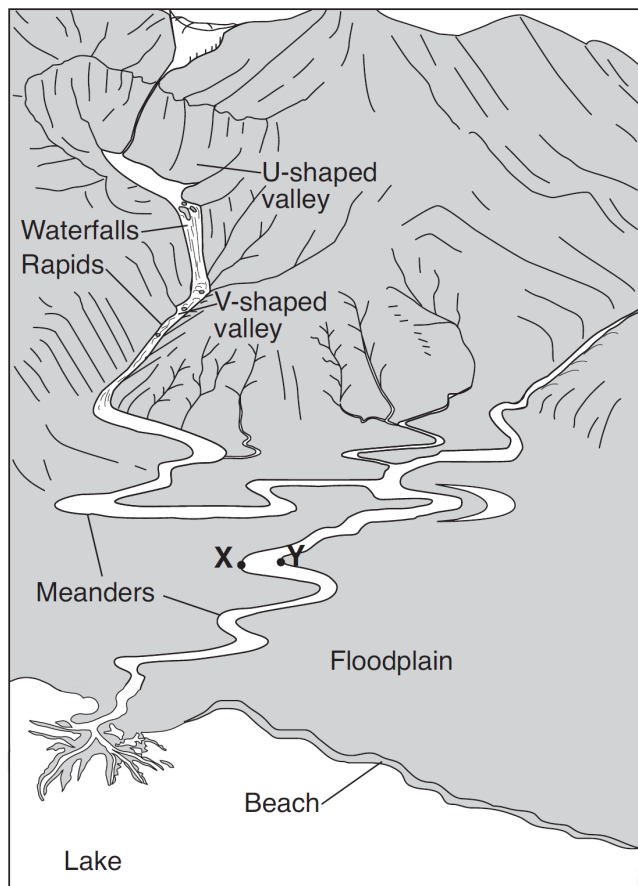
In 1883, Earth was divided into 24 time zones. The United States (excluding Alaska and Hawaii) has four time zones, which are indicated by different shadings on the map. Each zone is roughly centered on lines of longitude that are 15° apart. These lines are shown as dashed lines on the map. Most locations within a time zone have the same time. This time is called standard time. As you move to the west, the time in each zone is one hour earlier than the previous time zone.



When it is 1 a.m. in New York City, what time is it in Denver?

Midterm Review

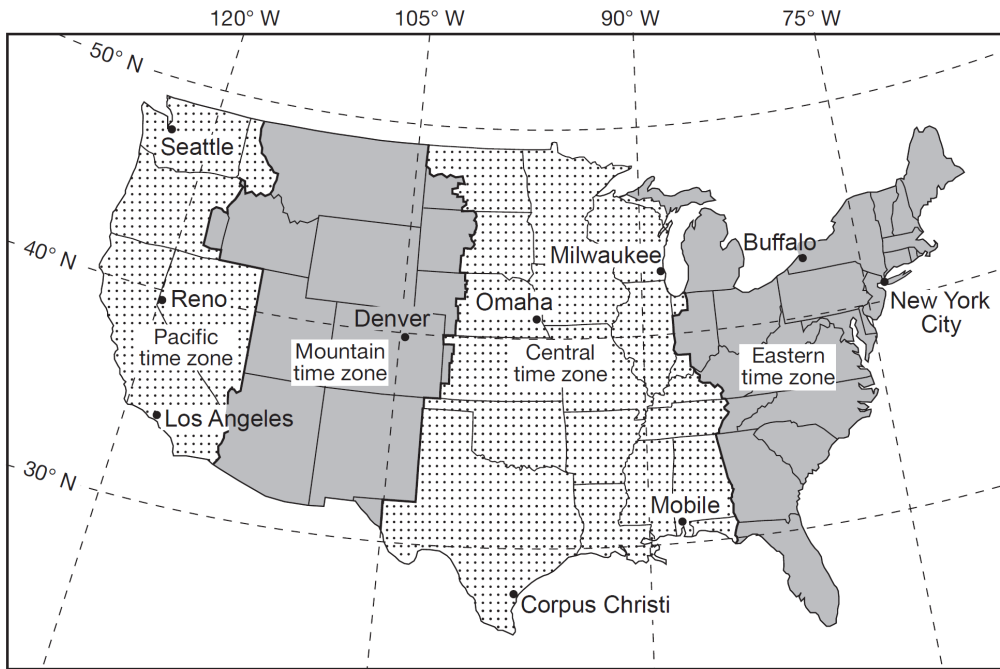
81. Base your answer to the following question on the diagram below, which shows several different landscape features. Points *X* and *Y* indicate locations on the streambank.



Explain why the upper valley in the mountains is U-shaped and the lower valley is V-shaped.

Midterm Review

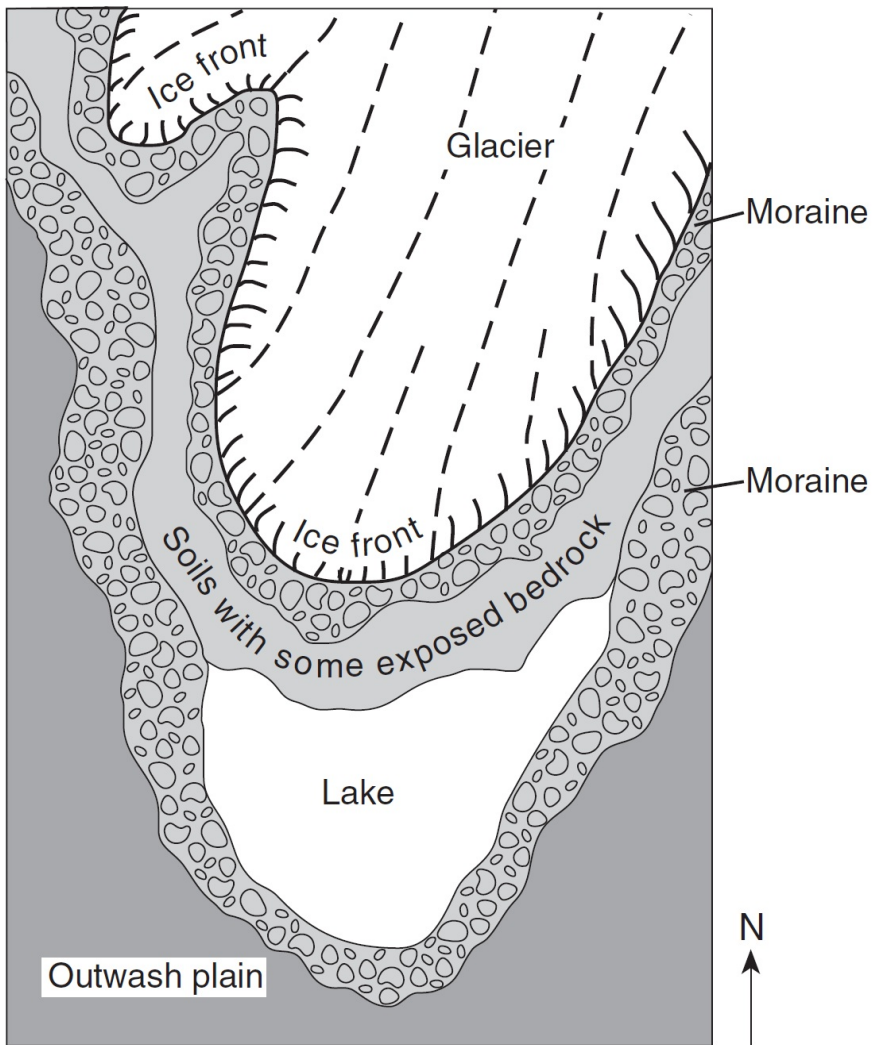
82. Base your answer to the following question on the map below and on your knowledge of Earth science. The map shows the four time zones and some latitude and longitude lines across the continental United States. Some cities are labeled on the map.



Identify the city labeled on the map where sunrise occurs first each day.

Midterm Review

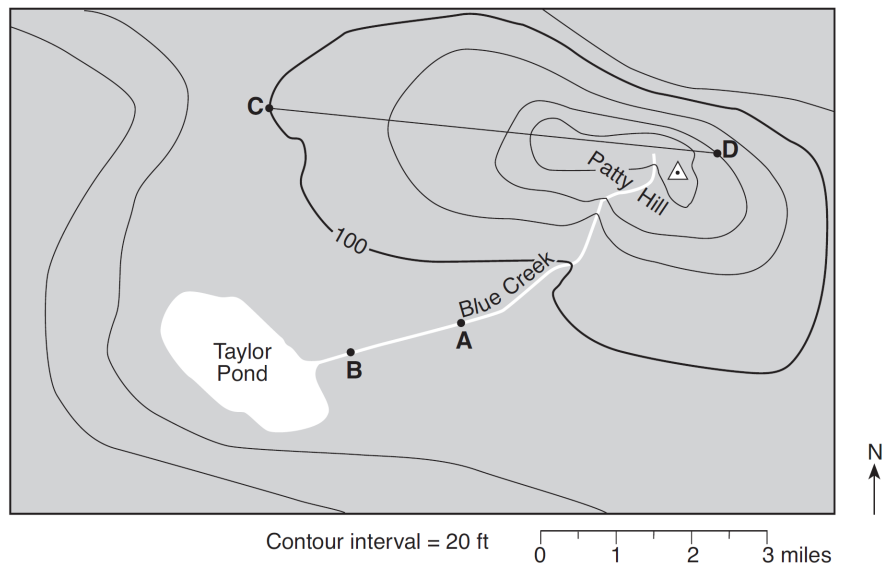
83. Base your answer to the following question on the map below and on your knowledge of Earth science. The map shows a retreating valley glacier and the features that have formed because of the advance and retreat of the glacier.



Describe *one* piece of evidence likely to be found on the exposed bedrock surfaces that could indicate the direction this glacier moved.

Midterm Review

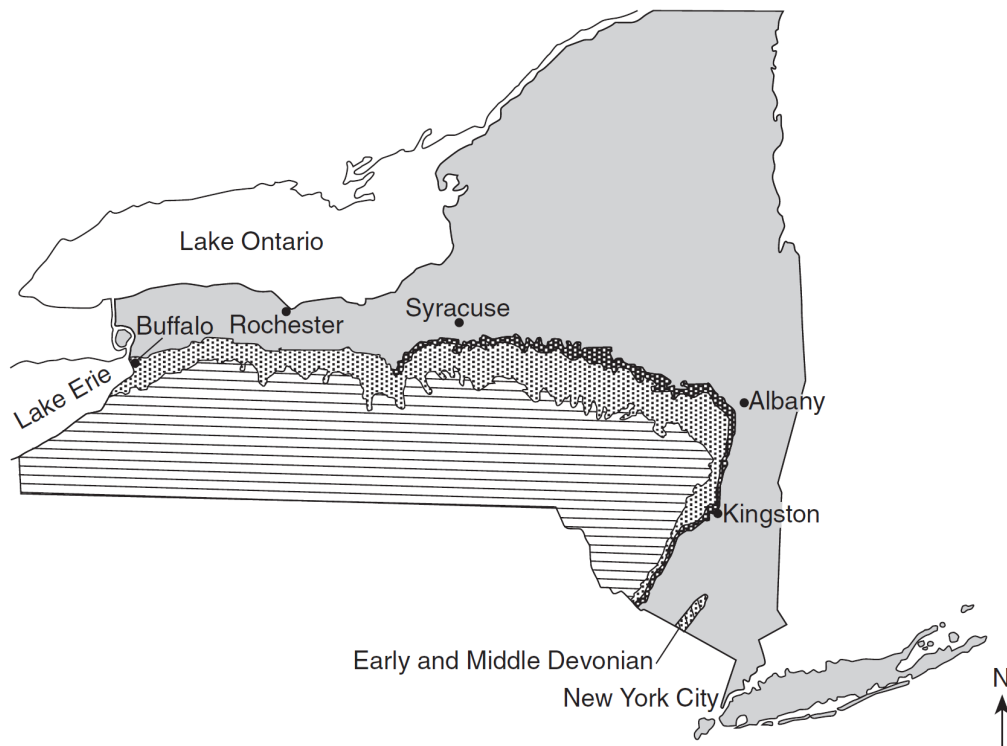
84. Base your answer to the following question on the topographic map shown below. Letters *A*, *B*, *C*, and *D* represent locations on Earth's surface. The triangular symbol marks the highest elevation on Patty Hill. Elevations are shown in feet.






Explain how the shape of the contour lines crossing Blue Creek shows the direction that the creek is flowing.

Midterm Review

85. Base your answer to the following question on the partial geologic map below and on your knowledge of Earth Science. The map shows the geographical distribution of most of the Devonian-age surface bedrock in New York State.

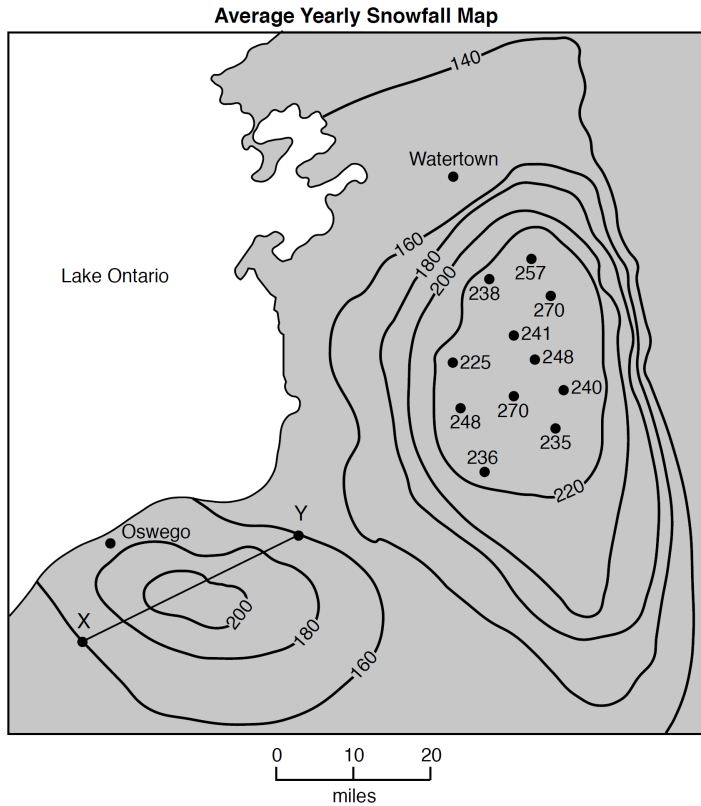


Key					
	Late Devonian		Middle Devonian		Early Devonian

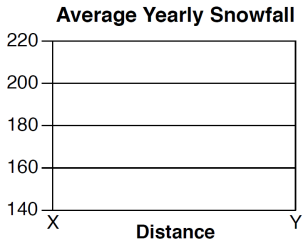
State the name of the New York State landscape region that includes most of the Devonian-age surface bedrock shown on the map.

Midterm Review

Base your answers to questions 86 and 87 on the snowfall map below and on your knowledge of Earth science. The snowfall map shows some average yearly snowfall values, measured in inches, recorded for a portion of New York State. Some average yearly snowfall isolines have been drawn. Line XY is a reference line on the map. The cities of Watertown and Oswego are shown on the map.



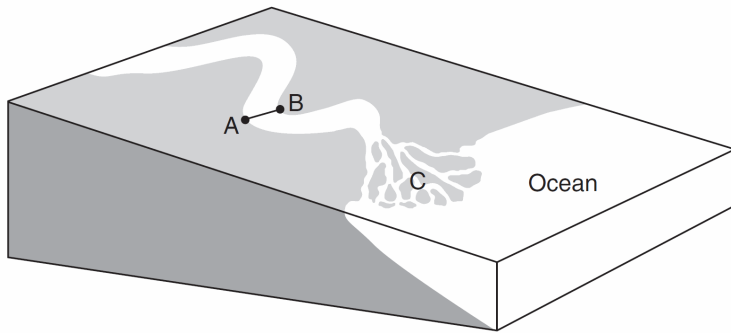
86. On the grid below, construct a profile of the average annual snowfall along line XY by plotting the value of each isoline that crosses line XY. Connect *all six* plots with a line to complete the profile.



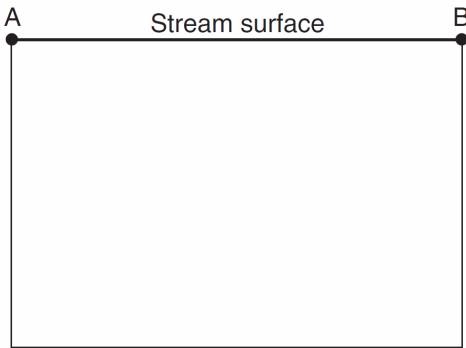
87. On the map, draw the 240-inch average yearly snowfall isoline.

Midterm Review

88. Base your answer to the following question on the block diagram below and on your knowledge of Earth science. The diagram represents a meandering stream flowing into the ocean. Points *A* and *B* represent locations along the streambanks. Letter *C* indicates a triangular-shaped depositional feature where the stream enters the ocean.

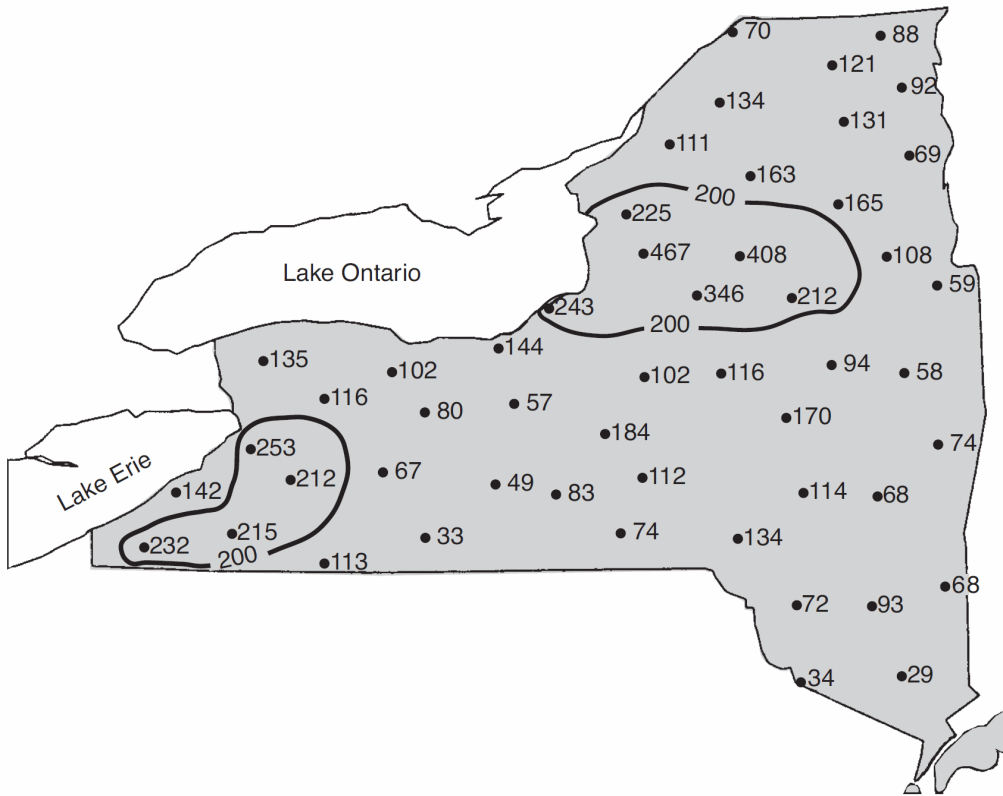


The top of the box below represents the stream surface between points *A* and *B*. In the box, draw a line from point *A* to point *B* to represent a cross-sectional view of the shape of the bottom of the stream channel.



Midterm Review

Base your answers to questions 89 and 90 on the map below, which shows the snowfall from the fall of 1976 through the spring of 1977, measured in inches, for most of New York State. The 200-inch snowfall isolines are shown on the map.



89. On the map above, draw the 100-inch snowfall isoline. Extend the isoline to the edges of New York State.

90. The amount of snowfall for Massena is shown on the map. What was the amount of snowfall for Massena?

2.DESCRIBING THE EARTH (20)**2.B.Positions on Earth (12)**

2.B.i.Latitude/Longitude/Polaris (3)

2.B.ii.Position Description (9)

2.B.ii.b.Topographical Maps/Gradient (9)

2.C.Constructed Response II (8)**8.THE DEPOSITIONAL PROCESS (15)****8.C.Landscape Characteristics (12)**

8.C.ii.Stream Patterns (4)

8.C.i.General (4)

8.C.iii.Landscape Regions of New York State (4)

8.B.Erosional - Depositional System (1)

8.B.ii.Dominant Process (1)

8.E.Constructed Response VIII (2)**5.WEATHER AND THE ATMOSPHERE (6)****5.D.Climate Pattern Factors (2)**

5.D.ii.Elevation (1)

5.D.iii.Large Bodies of Water / Ocean Current (1)

5.A.Atmospheric Variables (3)

5.A.vi.Environmental Changes / Pollution (1)

5.A.iii.Pressure Variations / Wind (2)

5.C.Atmospheric Energy Exchanges (1)

5.C.i.Input of Moisture & Energy (1)

5.C.i.a.Evaporation and Transpiration (1)

6.GROUND WATER (12)**6.A.Earth's Water (10)**

6.A.i.Ground Water (9)

6.A.i.a.Infiltration (6)

6.A.i.c.Porosity (3)

6.A.ii.Surface Water Runoff (1)

6.C.Constructed Response VI (2)**4.ENERGY IN EARTH PROCESSES (2)****4.A.Properties of Electromagnetic Waves/Energy Transfer (1)**

4.A.ii.Energy Transfer (1)

4.A.ii.a.Thermodynamics (1)

4.B.Energy Transformation (1)

4.B.i.Latent / Specific Heat (Qualitative) (1)

7.THE EROSIONAL PROCESS (18)**7.B.Erosion (14)**

7.B.ii.Factors affecting Transportation (12)

7.B.ii.a.Gravity (4)

7.B.ii.b.Water Erosion/Stream Channel Shape (2)

7.B.ii.c.Wind and Ice Erosion (6)

7.B.i.Evidence of Erosion (2)

7.B.i.b.Properties of Transported Materials (2)

7.A.Weathering (2)

7.A.iii.Soil Formation (1)

7.A.i.Weathering Processes (1)

7.A.i.a.Physical (1)

7.C.Constructed Response VII (2)**11.INTERPRETING GEOLOGICAL HISTORY (1)****11.D.Constructed Response XI (1)**

#	QID#	Ans	Difficulty	Standards
1	4469	D	Unassigned	Latitude/Longitude/Polaris
2	6877	D	Unassigned	Stream Patterns
3	6879	C	Unassigned	Stream Patterns
4	6878	A	Unassigned	Dominant Process
5	1553	C	Basic	Archived Questions
6	1554	C	Intermediate	Archived Questions
7	6230	B	Unassigned	Elevation
8	3406	C	Unassigned	Infiltration
9	3407	B	Unassigned	Infiltration
10	3403	B	Unassigned	Infiltration
11	3405	B	Unassigned	Infiltration
12	3404	D	Unassigned	Infiltration
13	7519	D	Unassigned	Thermodynamics
14	1952	A	Unassigned	Archived Questions
15	1954	C	Unassigned	Archived Questions
16	1956	D	Intermediate	Archived Questions
17	1955	C	Basic	Archived Questions
18	1953	B	Advanced	Archived Questions
19	2536	B	Unassigned	Environmental Changes / Pollution
20	6162	B	Unassigned	Gravity
21	4012	D	Unassigned	Water Erosion/Stream Channel Shape
22	4010	A	Unassigned	Archived Questions
23	4011	D	Unassigned	Properties of Transported Materials
24	1772	B	Unassigned	Archived Questions
25	3487	A	Unassigned	Wind and Ice Erosion
26	3486	C	Unassigned	Wind and Ice Erosion
27	6678	A	Unassigned	Wind and Ice Erosion
28	2342	C	Unassigned	Archived Questions

#	QID#	Ans	Difficulty	Standards
29	1301	C	Intermediate	Archived Questions
30	5175	B	Unassigned	Stream Patterns
31	3276	B	Unassigned	General
32	2104	B	Unassigned	Archived Questions
33	4874	A	Unassigned	Latitude/Longitude/Polaris
34	4875	C	Unassigned	Latitude/Longitude/Polaris
35	6698	A	Unassigned	Topographical Maps/Gradient
36	5749	B	Unassigned	Stream Patterns
37	7285	A	Unassigned	Properties of Transported Materials
38	6758	B	Unassigned	Soil Formation
39	89	D	Basic	Archived Questions
40	7875	D	Unassigned	Porosity
41	5391	B	Unassigned	Latent / Specific Heat (Qualitative)
42	854	C	Unassigned	Archived Questions
43	219	C	Unassigned	Pressure Variations / Wind
44	2221	A	Unassigned	Wind and Ice Erosion
45	5817	B	Unassigned	Gravity
46	2880	A	Unassigned	Topographical Maps/Gradient
47	2878	A	Unassigned	Topographical Maps/Gradient
48	2879	D	Unassigned	Topographical Maps/Gradient
49	2877	D	Unassigned	Topographical Maps/Gradient
50	2881	D	Unassigned	Topographical Maps/Gradient
51	4706	A	Unassigned	Water Erosion/Stream Channel Shape
52	4426	C	Unassigned	Pressure Variations / Wind
53	7303	D	Unassigned	Infiltration
54	2326	A	Unassigned	Archived Questions
55	4576	C	Unassigned	Landscape Regions of New York State
56	7452	B	Unassigned	Wind and Ice Erosion

#	QID#	Ans	Difficulty	Standards
57	691	A	Unassigned	Landscape Regions of New York State
58	1484	B	Unassigned	Topographical Maps/Gradient
59	1485	D	Unassigned	Topographical Maps/Gradient
60	8590	C	Unassigned	Gravity
61	6222	D	Unassigned	Surface Water Runoff
62	8527	C	Unassigned	General
63	8525	B	Unassigned	General
64	8526	C	Unassigned	General
65	6134	B	Unassigned	Porosity
66	3765	C	Unassigned	Evaporation and Transpiration
67	6076	A	Unassigned	Gravity
68	6419	C	Unassigned	Physical
69	3296	C	Unassigned	Topographical Maps/Gradient
70	7971	C	Unassigned	Large Bodies of Water / Ocean Current
71	1271	B	Unassigned	Archived Questions
72	2381	D	Unassigned	Porosity
73	695	A	Unassigned	Landscape Regions of New York State
74	6093	B	Unassigned	Wind and Ice Erosion
75	6297	n/a	Unassigned	Constructed Response II
76	6035	n/a	Unassigned	Constructed Response VI
77	6037	n/a	Unassigned	Constructed Response VI
78	5611	n/a	Unassigned	Constructed Response VIII
79	5697	n/a	Unassigned	Landscape Regions of New York State
80	6031	n/a	Unassigned	Constructed Response II
81	7075	n/a	Unassigned	Constructed Response VII
82	7888	n/a	Unassigned	Constructed Response II
83	7487	n/a	Unassigned	Constructed Response VII
84	6971	n/a	Unassigned	Constructed Response II

#	QID#	Ans	Difficulty	Standards
85	7404	n/a	Unassigned	Constructed Response XI
86	8730	n/a	Unassigned	Constructed Response II
87	8729	n/a	Unassigned	Constructed Response II
88	7912	n/a	Unassigned	Constructed Response VIII
89	6825	n/a	Unassigned	Constructed Response II
90	6826	n/a	Unassigned	Constructed Response II

Answer Key
Midterm Review 2019

1. D
2. D
3. C
4. A
5. C
6. C
7. B
8. C
9. B
10. B
11. B
12. D
13. D
14. A
15. C
16. D
17. C
18. B
19. B
20. B
21. D
22. A
23. D
24. B
25. A
26. C
27. A
28. C
29. C
30. B
31. B
32. B
33. A
34. C
35. A
36. B
37. A
38. B
39. D
40. D
41. B
42. C
43. C
44. A
45. B

46. A
47. A
48. D
49. D
50. D
51. A
52. C
53. D
54. A
55. C
56. B
57. A
58. B
59. D
60. C
61. D
62. C
63. B
64. C
65. B
66. C
67. A
68. C
69. C
70. C
71. B
72. D
73. A
74. B

75. Any elevation between 680 feet and 700 feet
76. evaporation.
77. *Examples:* — The soil is saturated. — Rate of rainfall exceeds the rate of infiltration. — The ground is frozen. — The land has a steep slope.

78. Responses include, but are not limited to: Glacial sediment is unsorted; piles of mixed sediment sizes.

79. *Examples:* — Allegheny Plateau – Appalachian Plateau (uplands) – Catskills

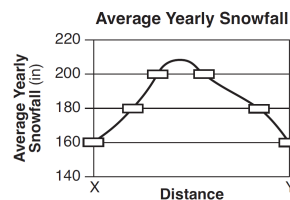
80. 11 p.m.
81. U-shaped: — It was eroded by glaciers. — A glacier formed the valley. — formed by glacial ice
V-shaped: — Running water cut the V-shaped valley. — A stream formed the valley.

82. New York City *or* New York *or* NYC
83. –scratch- es/striations on the bedrock surface
–grooves in bedrock
–a boulder transported from a more northerly outcrop on the bedrock
–an erratic –drumlin

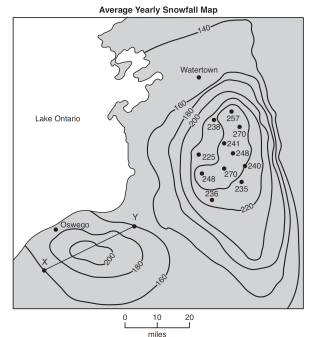
84. — Contour lines that cross the stream bend in the opposite direction of stream flow. — Contour lines form V-shapes that indicate the uphill or upstream direction. — Contour lines bend upstream.

85. –Allegheny Plateau
–Appalachian Plateau
–Appalachian Uplands

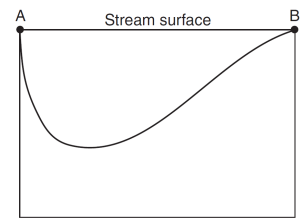
86.



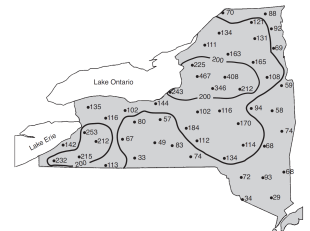
87.



88.



89.



90. 70 in.