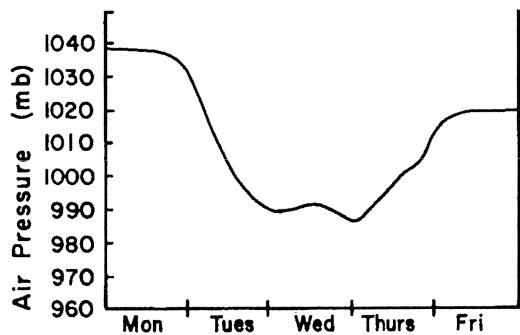
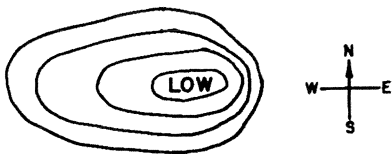


- Which weather conditions are most probable when the moisture content of the air increases, resulting in a lower atmospheric pressure?
 - sunny and fair
 - cold and windy
 - partly cloudy, with skies becoming clear
 - cloudy, with a chance of precipitation
- Weather-station measurements indicate that the dewpoint temperature and air temperature are getting farther apart and that air pressure is rising. Which type of weather is most likely arriving at the station?
 - a snowstorm
 - a warm front
 - cool, dry air
 - maritime tropical air
- The graph below shows the surface air pressure at a certain city during a five-day period. On which day was the warmest airmass probably over the city for the entire day?

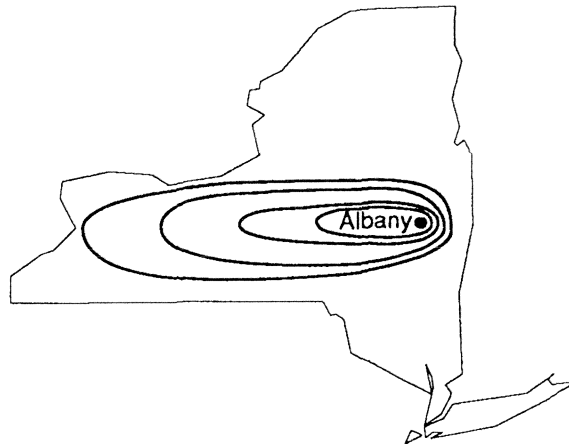


- Monday
 - Tuesday
 - Wednesday
 - Friday
- The diagram below shows the isolines of air pressure around a low-pressure center. On which side of the low-pressure center will the wind speed be greatest?



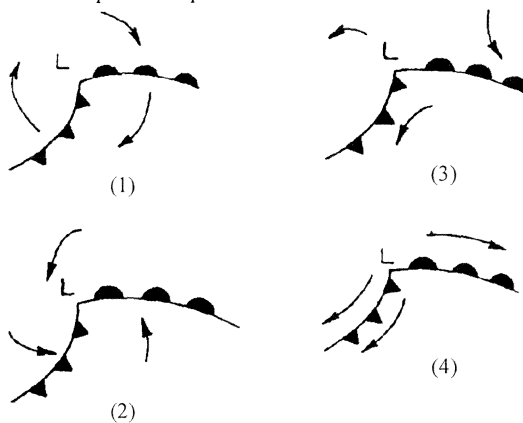
- north
 - south
 - east
 - west
- As the temperature of the atmosphere at a given location increases, the air pressure will most likely
 - decrease
 - increase
 - remain the same
 - As wind velocity decreases, the distance between isobars on a weather map will
 - decrease
 - increase
 - remain the same
 - At which of these latitudes would average annual precipitation be greatest?
 - 0°
 - 30° N
 - 90° N
 - 90° S
 - In the Northern Hemisphere, what is the direction of surface wind circulation in a low-pressure system?
 - counterclockwise and outward from the center
 - counterclockwise and toward the center
 - clockwise and outward from the center
 - clockwise and toward the center

- The weather map below shows closely spaced isobars in the region of Albany, New York.



At the time that the weather data were collected, Albany was most probably experiencing

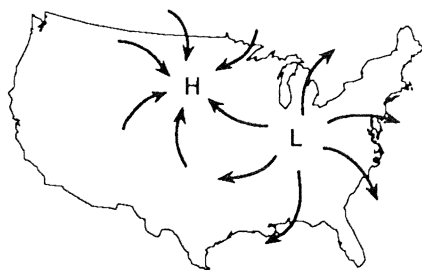
- a high wind velocity
 - a high temperature
 - the passage of a dry air mass
 - the passage of a warm air mass
- Which diagram below best represents the air circulation around a Northern Hemisphere low-pressure center?



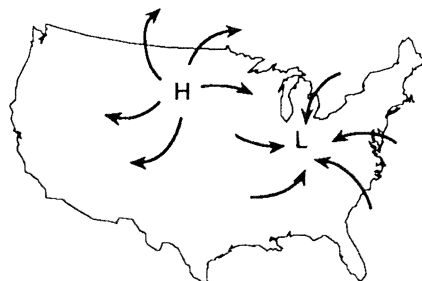
- What is the approximate dewpoint temperature when the dry-bulb reading is 14°C and the wet-bulb reading is 8°C?
 - 1°C
 - 6°C
 - 6°C
 - 9°C
- The relative humidity is 100% when
 - the atmosphere is relatively dry
 - the air is at its saturated vapor pressure
 - the air pressure is high
 - transpiration equals evaporation
- What is the approximate dewpoint temperature if the dry-bulb temperature is 13°C and the wet-bulb temperature is 10°C?
 - 7°C
 - 10°C
 - 3°C
 - 25°C
- What is the dewpoint temperature when the dry-bulb temperature is 22°C and the wet-bulb temperature is 15°C?
 - 7°C
 - 10°C
 - 12°C
 - 14°C

15. Which map correctly shows the wind directions of the high-pressure and low-pressure systems?

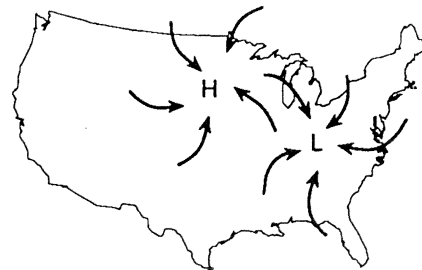
(1)



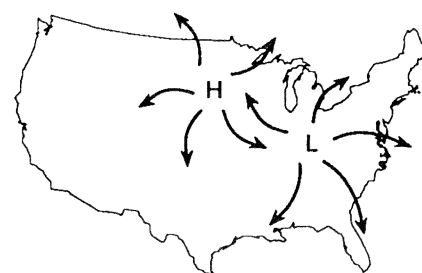
(2)



(3)



(4)



16. What is the dewpoint temperature when the dry-bulb temperature is 14°C and the wet-bulb temperature is 10°C?

- (1) -17°C (3) 3°C
 (2) 6°C (4) 4°C

17. What is the dewpoint temperature when the dry-bulb temperature is 12°C and the wet-bulb temperature is 7°C?

- (1) 1°C (3) -5°C
 (2) -2°C (4) 4°C

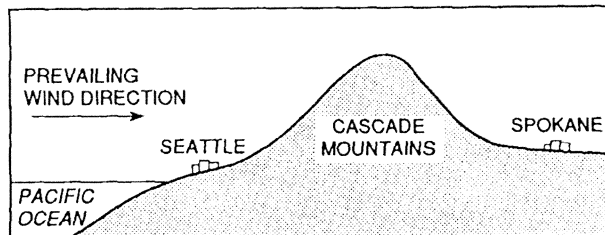
18. Wind moves from regions of

- (1) high temperature toward regions of low temperature
 (2) high pressure toward regions of low pressure
 (3) high precipitation toward regions of low precipitation
 (4) high humidity toward regions of low humidity

19. Clouds usually form when

- (1) air temperature reaches the dewpoint
 (2) evaporation has warmed the surrounding air
 (3) relative humidity is 0%
 (4) condensation nuclei have been removed from the air

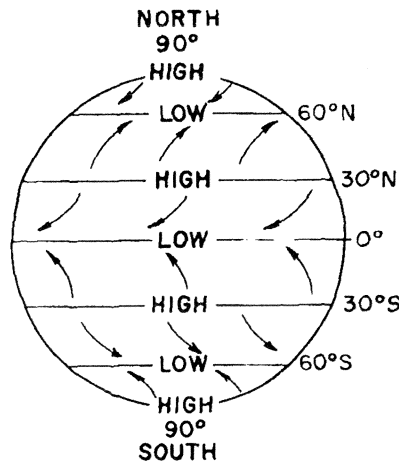
20. The diagram below shows the positions of the cities of Seattle and Spokane, Washington. Both cities are located at approximately 48° North latitude, and they are separated by the Cascade Mountains.



How does the climate of Seattle compare with the climate of Spokane?

- (1) Seattle – hot and dry
 Spokane – cool and humid
 (2) Seattle – hot and humid
 Spokane – cool and dry
 (3) Seattle – cool and humid
 Spokane – warm and dry
 (4) Seattle – cool and dry
 Spokane – warm and humid

21. The diagram below shows the Earth's high and low air pressure belts and direction of prevailing winds for a particular time of the year. The winds do *not* appear to blow in a straight line from the high-pressure belts to the low-pressure belts. Which statement best explains this observation?



- (1) Wind direction is modified by the Earth's rotation.
 (2) Wind direction is modified by land forms.
 (3) Wind direction is modified by water areas.
 (4) Wind direction is modified by the Sun's motion.

22. According to the *Earth Science Reference Tables*, the prevailing winds at 45° S latitude are from the

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