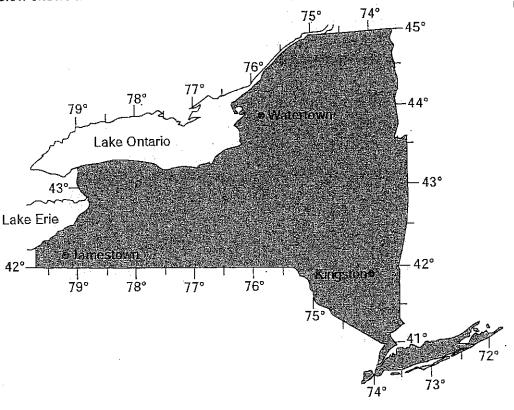
Questions 7 and 8 refer to the following:

The map below shows the locations of Jamestown, Watertown, and Kingston in New York State



- 7) Earth's system of longitude is based on which motion?
 - 1) Earth's rotation
 - 2) the Sun's rotation

- 3) Earth's revolution around the Sun
- 4) the Sun's revolution around Earth
- 8) An observer in Watertown, New York, would see the star Polaris at an altitude of approximately
 - 1) 44°

2) 45°

3) 75°

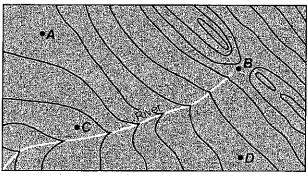
- 4) 76°
- 9) If an observer on Earth views Polaris on the horizon, the observer is located at the
 - 1) Tropic of Cancer (23.5°N)

3) North Pole (90°N)

2) equator (0°)

- 4) Tropic of Capricorn (23.5°S)
- 10) Approximately which percentage of Earth's surface is exposed above water?
 - 1) 50%
- 2) 70%
- 3) 30%
- 4) 90%

- 11) Which list shows atmospheric layers in the correct order upward from the Earth's surface?
 - 1) thermosphere, troposphere, mesosphere, stratosphere
 - 2) stratosphere, mesosphere, troposphere, thermosphere
 - 3) thermosphere, mesosphere, stratosphere, troposphere
 - 4) troposphere, stratosphere, mesosphere, thermosphere
- 12) In which atmospheric layer is most water vapor found?
 - 1) thermosphere
- 2) troposphere
- 3) mesosphere
- 4) stratosphere
- 13) Four locations, A, B, C, and D, are represented on the topographic map below.



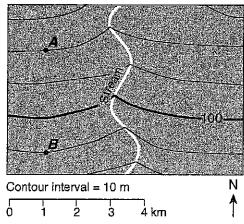
Which lettered location has the highest elevation?

1) A

2) D

3) C

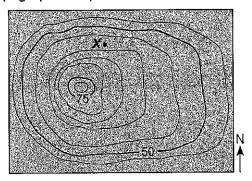
- 4) B
- 14) The topographic map below shows the location of a stream. Points *A* and *B* are locations on Earth's surface.



What is the gradient between points A and B?

- 1) 10 m/km
- 2) 20 m/km
- 3) 1 m/km
- 4) 2 m/km

15) Point X is a location on the topographic map below. Elevations are measured in meters.



What is a possible elevation, in meters, of point X?

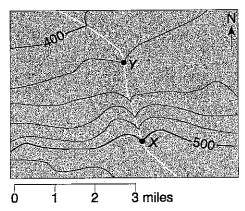
1) 55

2) 70

3) 57

4) 68

16) The topographic map below shows a stream crossing several contour lines and passing through points *X* and *Y*. Elevations are measured in feet.

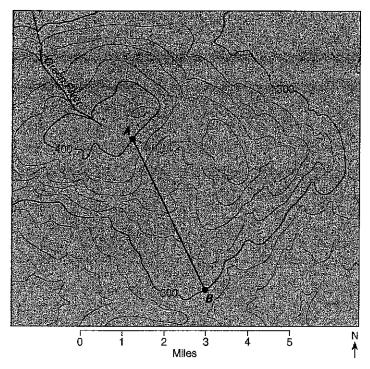


What is the approximate gradient between point X and point Y?

- 1) 40 ft/mi
- 2) 10 ft/mi
- 3) 80 ft/mi
- 4) 20 ft/mi

Questions 17 through 20 refer to the following:

A topographic map is shown below. Elevations are in feet. Points A and B are locations on the map.



- 17) According to the map shown, toward which direction does the Green River flow?
 - 1) southeast
- 2) southwest
- 3) northeast
- 4) northwest
- 18) What is the gradient along the straight line between points A and B shown on the map?
 - 1) 35 ft/mi
- 2) 25 ft/mi
- 3) 10 ft/mi
- 4) 20 ft/mi
- 19) What evidence can be used to determine that the land surface in the northeast corner of the map shown is relatively flat?
 - 1) the dark contour line labeled 300
- 3) a large region covered by water

2) a rapidly flowing river

4) the absence of many contour lines

20) Which of the following graphs best represents the profile along line AB shown on the map?

