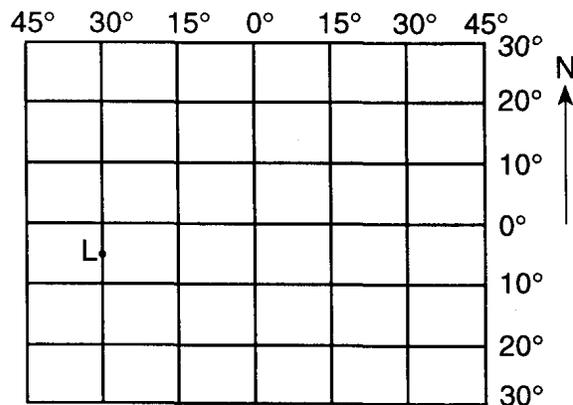


Mini-Lesson

1) The diagram below represents part of Earth's latitude-longitude system.



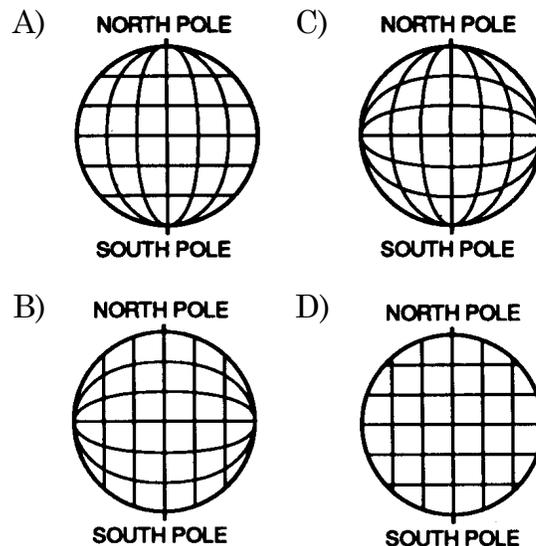
What is the latitude and longitude of point *L*?

- A) 5° E 30° N C) 5° N 30° E
- B) 5° W 30° S D) 5° S 30° W

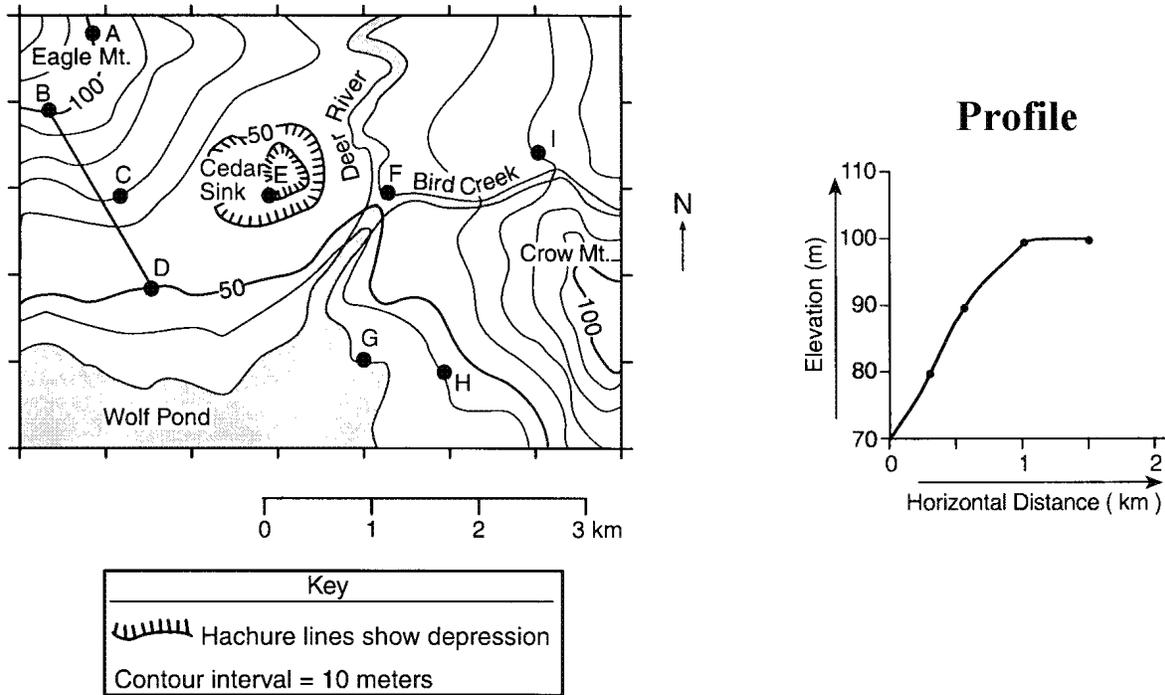
2) Which latitude and longitude coordinates represent a location on the continent of Australia?

- A) 20° N, 135° E C) 20° S, 135° E
- B) 20° N, 135° W D) 20° S, 135° W

3) The diagrams below represent four systems of imaginary lines that could be used to locate positions on a planet. Which system is most similar to the latitude-longitude system used on the Earth?



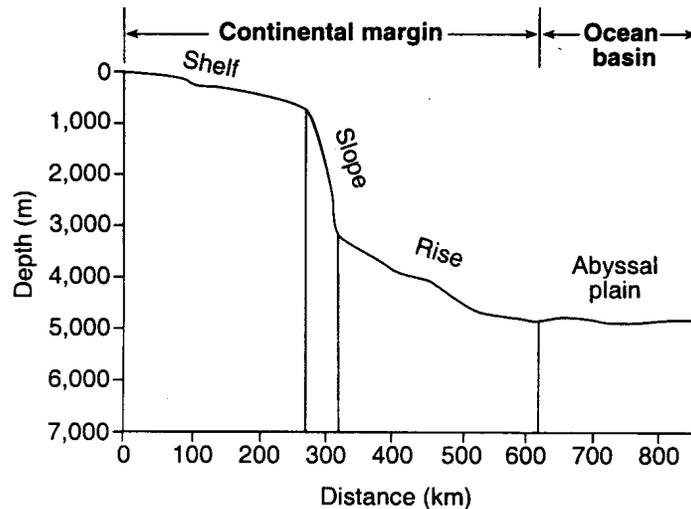
4) Base your answer to the following question on the topographic map below. Points A through I are locations on the map. Elevations are shown in meters.



What is the approximate gradient along line *BD*?

- A) 25 m/km B) 50 m/km C) 100 m/km D) 150 m/km

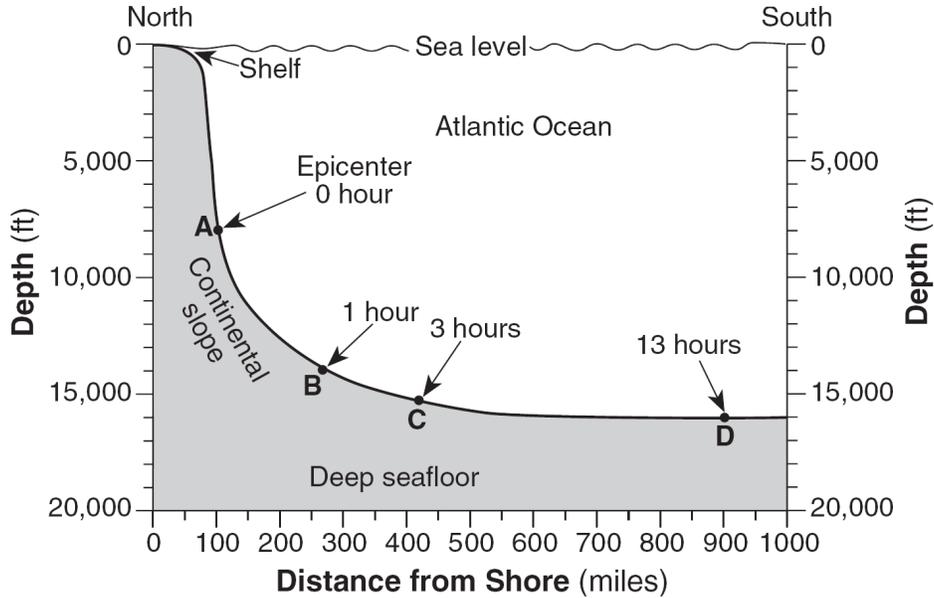
5) The profile below shows four regions of the ocean bottom.



In which list are these regions arranged in order of gradient from least steep to most steep?

- A) rise → abyssal plain → shelf → slope
 B) slope → rise → shelf → abyssal plain
 C) abyssal plain → shelf → rise → slope
 D) shelf → abyssal plain → rise → slope

6) Base your answer to the following question on the cross section below, which represents part of the Atlantic Ocean seafloor. An earthquake occurred on November 18, 1929, triggering an underwater sediment flow. The location of the epicenter is labeled. Letters *A* through *D* indicate locations on the seafloor. Time, in hours, at each lettered location represents the arrival of the sediment flow after the earthquake.



Calculate the gradient of the ocean floor between locations *A* and *D* and label your answer with the correct units.

Gradient = _____

Answer Key
geomapapplatlonggrad2

- 1) D
- 2) C
- 3) A
- 4) A
- 5) C
- 6) 9.75 to 10.25
Units:ft/mi
 feet/mile
 ft/per mile