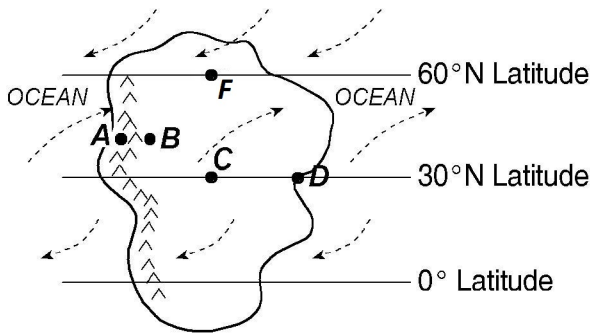


NAME: \_\_\_\_\_

## Climate MC Review

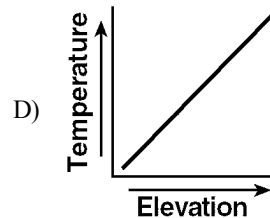
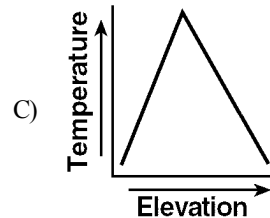
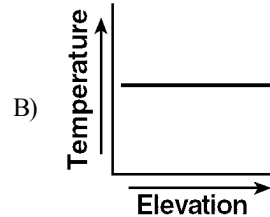
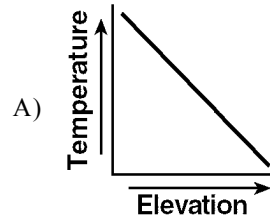
Questions 1 through 3 refer to the following:

The map below shows an imaginary continent on Earth. Arrows represent prevailing wind directions. Letters *A* through *E* represent locations on the continent. Locations *A* and *B* are at the same latitude and at the same elevation at the base of the mountains.



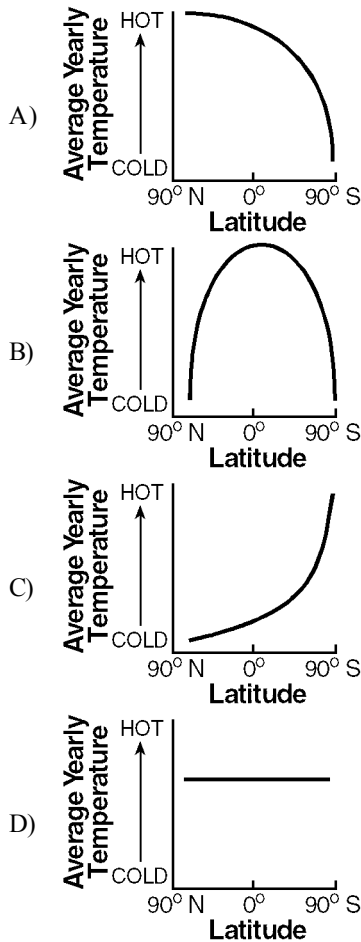
- 1) Over the course of a year, compared to location *B*, location *A* will have
  - A) less precipitation and warmer temperatures.
  - B) less precipitation and cooler temperatures.
  - C) more precipitation and cooler temperatures.
  - D) more precipitation and warmer temperatures.
- 2) Compared to the observations made at location *D*, location *C*
  - A) will have a smaller annual temperature range.
  - B) will have a larger annual temperature range.
  - C) will have exactly the same temperature.
  - D) will have no temperature change.
- 3) The climate at location *C* is much drier than at location *F*. This difference is *best* explained by the fact that location *C* is located
  - A) at a latitude that always receives more daylight.
  - B) in a dry climate belt.
  - C) farther from any mountain range
  - D) closer to a large body of water

- 4) Compared to an inland location of the same elevation and latitude, a coastal location is likely to have
  - A) warmer summers and cooler winters
  - B) cooler summers and warmer winters
  - C) warmer summers and warmer winters
  - D) cooler summers and cooler winters
- 5) Which graph *best* shows the general effect that differences in elevation above sea level have on the average annual temperature?



- 6) According to the *Earth Science Reference Tables*, at which of these latitudes would average annual precipitation be *greatest*?
  - A) 90° S
  - B) 90° N
  - C) 30° N
  - D) 0°

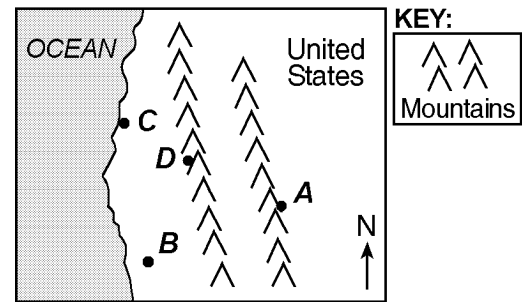
- 7) Which graph *best* represents the relationship between average yearly temperature and latitude?



- 8) A city located near the center of a large continent has colder winters and warmer summers than a city at the same elevation and latitude located on the continent's coast. Which statement *best* explains the difference between the cities' climates?

- A) Air masses originate only over land.  
 B) Windspeeds are greater over land than over oceans.  
 C) Water changes temperature more rapidly than land.  
 D) Land has a lower specific heat than water.

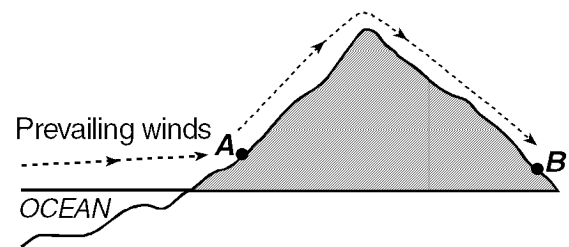
- 9) The map below shows the location of four cities, *A*, *B*, *C*, and *D*, in the western United States where prevailing winds are from the southwest.



Which city most likely receives the *least* amount of average yearly precipitation?

- A) *A*                      B) *B*                      C) *C*                      D) *D*

- 10) In the diagram of a mountain below, location *A* and location *B* have the same elevation.



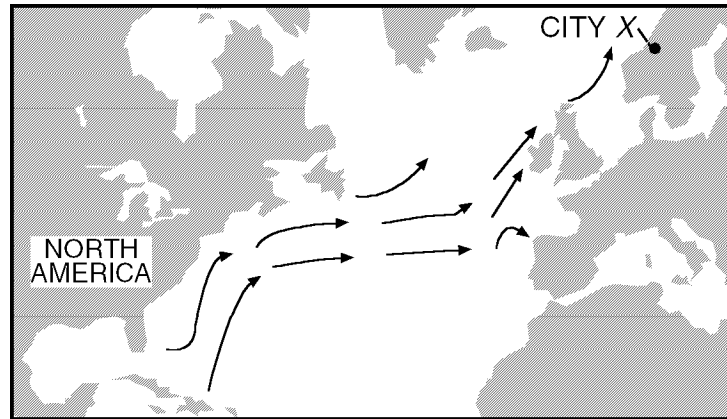
Compared to the climate at location *A*, the climate at location *B* will be

- A) warmer and drier                      C) warmer and wetter  
 B) cooler and drier                      D) cooler and wetter

- 11) Which statement about ocean currents below is correct?

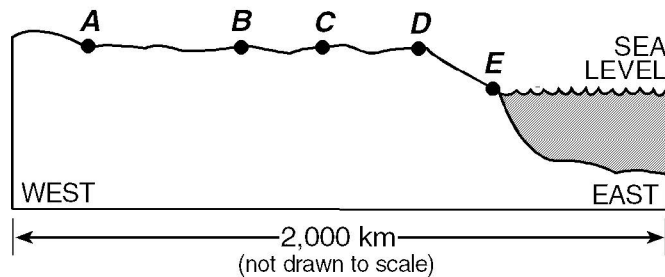
- A) Most cold ocean currents flow away from the equator.  
 B) Warm ocean currents cool the land they pass by.  
 C) Most warm ocean currents flow away from the equator.  
 D) Warm and cold ocean currents flow in random directions.

- 12) Arrows on the map below represent ocean currents.



These ocean currents affect the climate pattern of city *X* by

- A) decreasing the average annual precipitation.  
B) decreasing the average annual cloud cover  
C) increasing the average annual temperature  
D) increasing the average annual duration of insolation.
- 13) The diagram below represents a landscape profile. Points *A*, *B*, *C*, *D*, and *E* are locations in the mid-latitudes of the Northern Hemisphere.



At which location would the daily temperature range during the month of July be *smallest*?

- A) *B*                      B) *E*                      C) *C*                      D) *D*

## ANSWER KEY

- |       |        |        |
|-------|--------|--------|
| 1.) C | 6.) D  | 11.) C |
| 2.) B | 7.) B  | 12.) C |
| 3.) B | 8.) D  | 13.) B |
| 4.) B | 9.) A  |        |
| 5.) A | 10.) A |        |