

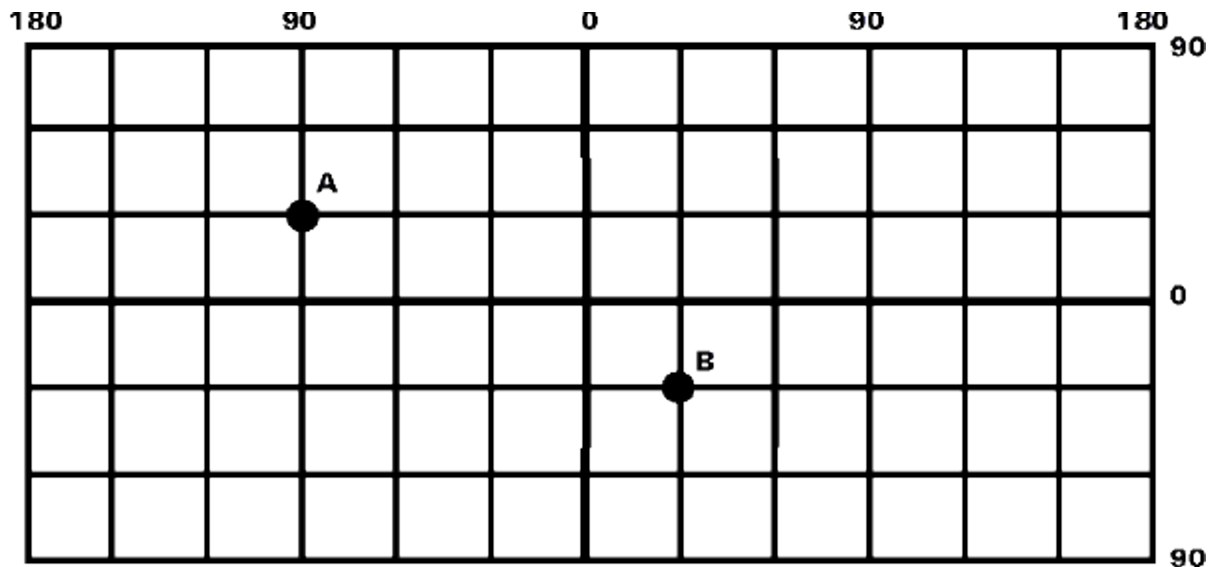
LATITUDE AND LONGITUDE LAB

Refer to grid lines on a globe:

1. The lines running north-south represent degrees of _____ which is measured from the _____ in a _____ and _____ direction. These lines are known also as _____.
2. The lines running east-west represent degrees of _____ which is measured from the _____ in an _____ and _____ direction. These lines are known also as _____.
3. The geographic grid used on the globe is based on the division of a circle in _____ degrees. Each degree is divided into _____ equal parts called minutes, and each minute into _____ equal parts called _____.
4. Latitude is numbered from _____ degrees at the equator to _____ degrees at either pole.

5. Longitude is numbered from _____ degrees at the prime meridian to _____ degrees at the international date line.
6. A degree of latitude is approximately _____ miles at the equator and _____ miles at the poles. A degree of longitude is approximately _____ miles at the equator and _____ miles at the poles.

USE THE FIGURE BELOW TO ANSWER QUESTIONS 14-19



7. What are the coordinates of point A? _____
8. Locate the same coordinates on a globe. In what country is point A located? _____
9. What are the coordinates of point B? _____
10. Locate the same coordinates on the globe. In what country is point B located? _____

11. Locate a point at 10 ° South Latitude and 45 ° West Longitude. Mark it CB.

12. Locate a point at 20 ° North Latitude and 75 ° East Longitude. Mark it D.

13. By examining the coordinates only, determine the APPROXIMATE distance between:

- a. New Orleans and St. Louis _____
- b. Philadelphia and Denver _____
- c. Wilmington, N.C. and Los Angeles _____
- d. Madrid, Spain and Edinburgh, Scotland _____

14. Write the following in their correct form:

60 degrees, 29 minutes, 5 seconds, North Latitude _____

10 degrees, 20 minutes, 50 seconds, South Latitude _____

125 degrees, 45 minutes, 3 seconds, West Longitude _____

15. Correct the errors in the following:

89° 47' 65" S _____

185° 24' 37" E _____

65° 77' 42" W _____

40° 50" 21' S _____

16. What is the latitude and longitude of Long Branch, NJ?

17. What large city has a similar latitude to that of Long Branch (Europe)?

18. What is this city's Latitude and longitude?

19. What large city in Asia has a similar latitude to that of Long Branch?

20. What is this city's Latitude and Longitude?

21. The term "antipodes" refers to two places on opposite sides of the earth so that a straight line drawn through the earth from one to the other passes through the center of the earth. To be exact antipodes, two places must be 180° of longitude away from each other, antipode must be as many degrees north latitude as the other is south latitude.

What are the coordinates of the antipode of

Chicago? _____

What is the nearest large land mass? _____

What is the nearest large city? _____

22. Below are some geographic grid coordinates for selected cities of the world. Examine an atlas and identify each city.

$34^\circ 03' \text{ N}$, $118^\circ 15' \text{ W}$ _____

$34^\circ 20' \text{ S}$, $58^\circ 30' \text{ W}$ _____

$52^\circ 21' \text{ N}$, $4^\circ 52' \text{ E}$ _____

$61^\circ 12' \text{ N}$, $149^\circ 48' \text{ W}$ _____

23. A number of cities are listed below. Using an atlas, give latitude and longitude of each in degrees and minutes.

Milwaukee, Wisconsin _____

Quito, Ecuador _____

Calcutta, India _____

London England _____

Capetown, South Africa _____

Moscow, Russia _____

Miami, Florida _____