

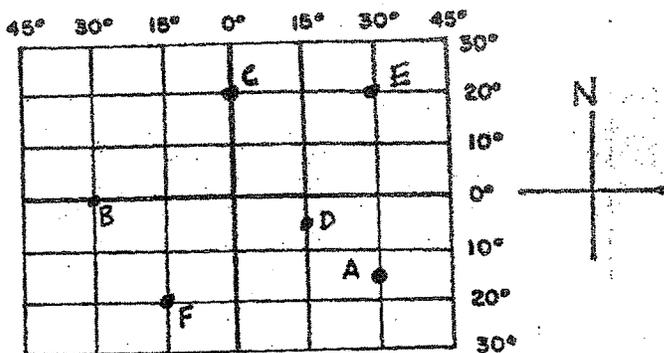
Key

Latitude, Longitude

Part A

Used on the Map on the right,
Find the locations of the following
points and answer the questions

Point	Latitude	Longitude
A	15°S	30°E
B	0°	30°W
C	20°N	0°
D	5°S	15°E
E	20°E	30°E
F	20°S	15°W



(Remember to include directions)

1) Which point is on the Equator? B

2) Which point is on the Prime Meridian? C

3) Which point is Farthest South? F

4) How many points are in the Northern Hemisphere?

2

5) What 2 points have the same latitude?

C + E

6) What 2 points have the same longitude?

A + E

7) List the points in the Western Hemisphere

B, F

8) List the points in the Southern Hemisphere.

A, D, F

Longitude and Latitude HW

Part I - General knowledge

1) Lines of longitude are called meridians. On a map they run N & S but are measured in degrees $^{\circ}E$ or $^{\circ}W$ of the Prime Meridian.

2) Lines of latitude are called parallels. On a map they run East & West but are measured in degrees $^{\circ}N$ or $^{\circ}S$ of the Equator.

3) In one complete day the Earth turns 360° degrees on its axis. That means that every hour, the earth turns 15° degrees.

The latitude for the Tropic of Capricorn is $23\frac{1}{2}^{\circ}S$
 The latitude for the Tropic of Cancer is $23\frac{1}{2}^{\circ}N$

Part II - Time questions

5) New York is found at $75^{\circ}W$ longitude. If it is 11 P.M. in New York, what time is it at the Prime Meridian?

$$\begin{array}{r} 75 \\ - 0 \\ \hline 15 \overline{) 750} \\ \underline{150} \\ 500 \\ \underline{450} \\ 500 \\ \underline{450} \\ 500 \end{array}$$

5hrs.

4 AM

6) Rio de Janeiro is found at $45^{\circ}W$ longitude. Moscow is found at $45^{\circ}E$ longitude. If it is 2 P.M. in Moscow, what time is it in Rio?

$$\begin{array}{r} 45 \\ + 45 \\ \hline 15 \overline{) 900} \\ \underline{150} \\ 750 \\ \underline{750} \\ 0 \end{array}$$

6hrs.

8 AM

7) If you fly 135 degrees of longitude to the west, what will happen to the time?

WEST Earlier

$$15 \overline{) 135} \quad \text{9 hrs.}$$

9 hrs. Earlier

8) Anchorage, Alaska is found at 150 W longitude. How many hours of time separate Anchorage and Tokyo, Japan if Tokyo is found at 135 E longitude?

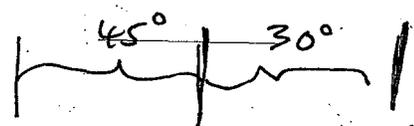
$$\begin{array}{r} 150 \\ + 135 \\ \hline 285 \end{array}$$

15 $\overline{) 285}$ 19 hrs

150°W

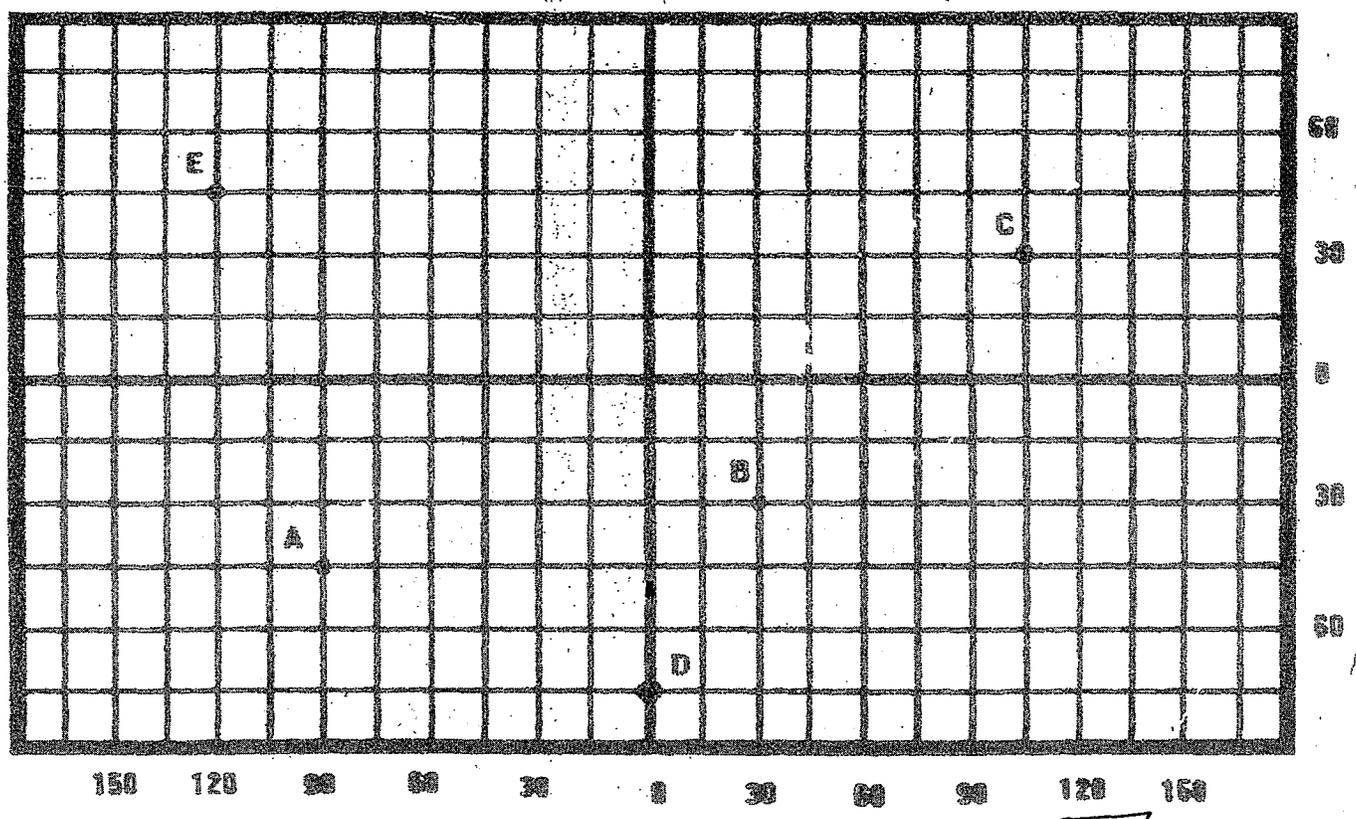
0°

135°E



19 hrs apart (or 5 hrs) 5 hrs.

Part III - Longitude and Latitude on a map.

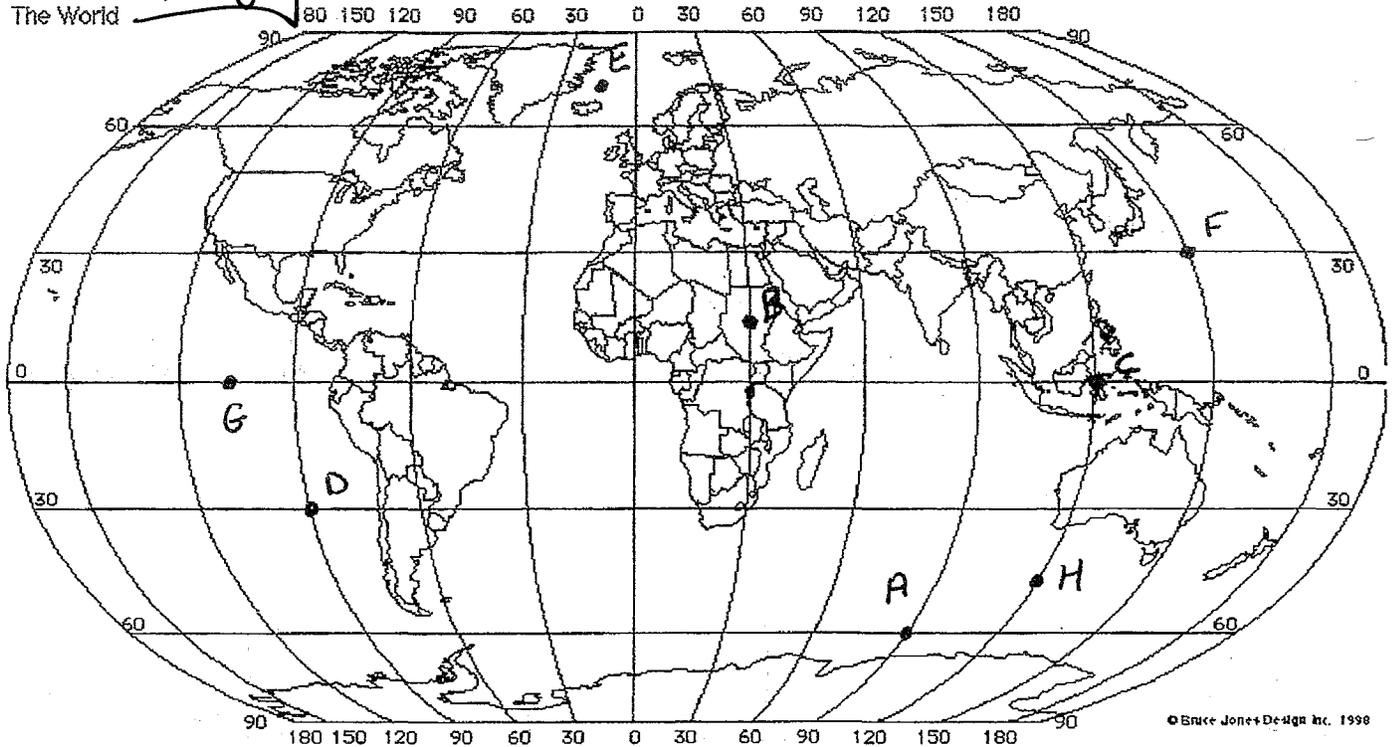


- A
- 45°S, 90°W
- B
- 30°S, 30°E
- C
- 30°N, 105°E
- D
- 75°S, 0°
- E
- 45°N, 120°W

Key

Classwork

The World



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5 pm 1. You are located at Point A on the map and it is 3:00 P.M. what time would it be at Point C?

2 AM 2. You are located at Point B on the map and it is 11:00 A.M. what time would it be at Point G? 9 hrs earlier.

6 pm 3. You are located at Point H on the map and it is 6:00 P.M. what time would it be at Point C?

7 AM 4. You are located at Point D on the map and it is 2:00 A.M. what time would it be at Point E? 5 hrs Later.

4 AM 5. You are located at Point E on the map and it is 7:00 P.M. what time would it be at Point H? 9 hrs Later.

E 6. It is 3:00 P.M. at Point D and it is 5 hours later at your location. Which letter would represent your location?

For each location write in the correct latitude and longitude:

Location A	Latitude <u>60°S</u>	<u>90°E</u>	Longitude <u>90°E</u>
Location B	Latitude <u>15°N</u>	<u>30°E</u>	Longitude <u>30°E</u>
Location C	Latitude <u>0°</u>	<u>120°E</u>	Longitude <u>120°E</u>
Location D	Latitude <u>30°S</u>		Longitude <u>90°W</u>
Location E	Latitude <u>70°N</u>		Longitude <u>15°W</u>
Location F	Latitude <u>30°N</u>		Longitude <u>150°E</u>
Location G	Latitude <u>0°</u>		Longitude <u>105°W</u>