

Time Zone Questions

1. Which lines, latitude or longitude, separate time zones? _____

2. How many degrees are there in a standard time zone? _____

3. If two ships in the Pacific Ocean are three hours apart, how many degrees longitude separate them? _____

4. If two cities on the Earth have a 60° difference in longitude, what is the time difference between the two cities? _____

5. A person knows the solar time on the Prime Meridian and the local time. What determination can be made?

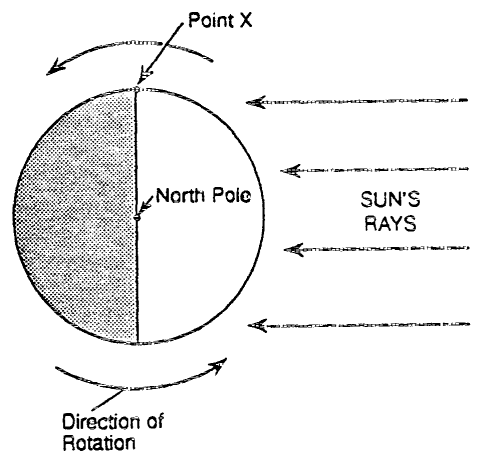
(1) the date	(3) the longitude at which the person is located
(2) the altitude of Polaris	(4) the latitude at which the person is located

6. Two cities on the globe have a 2 hour time difference. What is the difference in longitude between the two cities?

(1) 15°	(2) 30°	(3) 45°	(4) 60°
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The diagram below shows the rotating Earth as it would appear from a satellite over the North Pole.

7. The time at point X is closest to
 - (1) 6 am.
 - (2) 12 noon
 - (3) 6 p.m
 - (4) 12 midnight



Use the Grid Method to answer **questions 8-15**. Show the grid below each question to support your answers.

8. How many hours of time exist between 45°N , 15°E and 60°N , 60°E ? _____

9. If the time at 75°W longitude is 12:00pm, what time is it at 90°W longitude? _____

10. If the time at 120°W longitude is 9:00pm, what time is it at 75°W longitude? _____

11. The time at the Prime Meridian is 5:00pm.
What would the time be at a location 45° east of the Prime Meridian? _____

12. The time at 45°W is 3:00am.
At which longitude would the time be 6:00am? _____

13. The time in New York City (75°W) is 11:00pm.
What would the time be at the Prime Meridian? _____

14. If the time at 30°E longitude is 1:00pm, what time is it at 45°W longitude? _____

15. The time at the Prime Meridian is 5:00pm.
At which longitude would the time be 9:00pm? _____