

5. 24 hours in time = 360° longitude.
 1 hour in time = $\frac{1}{24}^\circ$ longitude.
 1 minute in time = $\frac{1}{1440}^\circ$ longitude.
 1 second in time = $\frac{1}{86400}^\circ$ longitude.

6. How express longitude in time?

Ans. Divide the number of degrees, etc., by 15.

7. How express time in longitude?

Ans. Multiply the number of hours, etc., by 15.

8. If the difference of time between two places is 19 min. 12 sec., what is their difference in longitude?

9. If the difference in longitude between two places is $20^\circ 36' 15''$, find the difference in time.

10. The difference of time between Albany and San Francisco is 3 hrs. 14 min. $47\frac{2}{3}$ sec. Find their difference in longitude.

11. The difference in longitude between St. Petersburg and Washington is $107^\circ 19' 45''$. Find their difference in time.

12. Montreal is $73^\circ 25'$ and St. Paul $93^\circ 4'$ west of Greenwich. What is the difference in clock-time between the two cities?

13. Montreal is $73^\circ 25'$ W. and Paris $2^\circ 20'$ E. of Greenwich. Find their difference in time.

14. How much earlier does the sun rise in Montreal than in New York, lon. 74° ? In Chicago, lon. $87^\circ 37' 45''$? In San Francisco, lon. $122^\circ 26'$?

15. When it is 9 A.M. in Montreal, what is the time in New York? In Chicago? In San Francisco?

(Time will be later in places east; earlier in places west. Why?)

16. When it is 3 o'clock in the afternoon at Greenwich, what will be the time in Montreal, lon. $73^\circ 25'$ W.? In Constantinople, lon. 29° E.? In Calcutta, $88^\circ 27'$ E.?