

HW
9/7/21

HOME ASSIGNMENT

Q1) In the grid shown below some points are marked. Using the figures marked with the grid, identify the latitudes and longitudes of these points.

- a) ~~*~~ 90°N, 75°E
- b) 120°N, 60°E
- c) 60°N, 60°E
- d) 45°N, 15°E
- e) 150°N, 0°E
- f) 120°N, 60°E
- g) 0°N, 30°E
- h) 75°N, 15°E
- i) 75°N, 45°E
- j) 180°N, 30°E

Q2) With the help of an atlas find out the longitude and latitudinal extension of following countries.

a. India : * The latitudinal extent of India from the north and Kashmir to south and Kanniyakumari is 37°6'N to 8°4'N

* The longitudinal extent of India from west end Gujrat to east and Arunachal Pradesh is $68^{\circ}7'$ to $97^{\circ}25'E$.

Japan: it extends from 20° to 45 north latitude and from 122° to 153° east longitude.

South Africa: latitudinal Extent of Africa is $37^{\circ}N$ to $35^{\circ}S$ whereas the longitudinal extent being $51^{\circ}E$ to $16^{\circ}W$.

Canada: its latitude and longitude is $60^{\circ}00'N$ and $95^{\circ}00'W$.

Iran: The latitudinal extent of Iran is $32.4279^{\circ}N$ and longitudinal extent is $53-6880^{\circ}E$.

Q3) What will be local time at Delhi $77^{\circ}E$ longitude when is 3pm - at Tokyo $139^{\circ}E$ longitude?

Ans - Longitude of Delhi = $77^{\circ}E$
Longitude of Tokyo = $139^{\circ}E$
The difference per degree = $139^{\circ} - 77^{\circ} = 62^{\circ}$

Difference of time per degree = 4 minutes
Difference between the time of Delhi
and Tokyo = $4 \times 62 = 248$ minutes = 4 hours
8 minutes.

Since Delhi lies west of Tokyo we shall
subtract 4 hours 8 minutes from Tokyo time.
Hence local time at Delhi is 10:52 a.m.