

- ✎ 11) How many degrees of longitude are there (shortest distance) between:
- a. 90°E and 170°E _____
 - b. 75°W and 105°W _____
 - c. 75°W and 30°E _____
 - d. 105°W and 105°E _____ (special case involving International Date Line)

- ✎ 12) Find the shortest distance in statute miles and kilometers:
- a. Between the Galapagos Islands (0° , 90°W) and the Howland islands (where Amelia Earhart disappeared (0° , 177°W)).
Statute Miles _____
Kilometers _____
 - b. Between Seward, Alaska (60°N , 150°W) and Oslo, Norway (60°N , 12°E)
Statute Miles _____
Kilometers _____
 - c. Between Camden, NJ (40°N , 75°W) and Beijing, China (40°N , 118°E)
(special case involving International Date Line)
Statute Miles _____
Kilometers _____
 - d. Distance in Latitude: Between Albuquerque, NM (35°N) and Boulder, CO (40°N)
Statute Miles _____
Kilometers _____

Decimalization of Latitude and Longitude

The National Weather Service (NWS) uses the decimal system with degrees and tenths of degrees not degrees, minutes and seconds. For example, $42^{\circ} 30' \text{N}$ is equal to 42.5°N . To decimalize a latitude and longitude all you need to do is to divide the minutes reading by 60 (i.e. $30'/60 = 0.5^{\circ}$, $45'/60 = 0.75^{\circ}$).

- ✎ 13) Decimalize the following latitude and longitude readings:
- a. $25^{\circ} 30' \text{N}$ _____
 - b. $110^{\circ} 15' \text{E}$ _____
 - c. $10^{\circ} 45' \text{S}$ _____
 - d. $88^{\circ} 5' \text{N}$ _____
 - e. $5^{\circ} 55' \text{N}$ _____
 - f. $57^{\circ} 47' 22'' \text{S}$ _____