SHEET-3

Q1-Consider an earth station located in Washington,DC,

Earth Station: Washington, DC

Latitude:	$L_E = 39° N = +39$
Longitude:	$l_E = 77° W = -77$
Altitude:	$H = 0$ km

and a GSO satellite located at 97 ◦ W.

Find the range, d, the elevation angle,and the azimuth angle,to the satellite.

Q2- : How do inclination and elevation determine the use of a satellite?

Q3:

A geostationary satellite is located at 90°W. Calculate the azimuth Angle, the range and antenna elevation angle for an earth-station antenna at latitude.35°N and longitude 100°W.

Q4:

Determine the limits of visibility for an earth station situated at mean sea level, at latitude 48.42° north, and longitude 89.26 degrees west. Assume a minimum angle of elevation of 5°.