

SE 312 - Introduction to Geomatics Engineering

Triangulation - Tutorial No. 5

A triangulation was carried out in clockwise run from A to observe horizontal angles of triangulation net ABQCA, including Base line **AB** whose azimuth was known to be **60° 00' 00"** and length **2600.00m**

Observed horizontal angles of triangle **ABC** (interior angles) are given as:

<BAC = 43° 00'; <CBA = 86° 00'; <ACB = 51° 00';

<QBC = 70° 00' and <BCQ=50° 00'

Assuming control point A (0.00; 0.00) m to be the **origin** of the coordinates system:

Compute:

- **Lengths of sides AC, BC and BQ and Azimuths of sides BC and BQ**
- **Coordinates of points B, C and Q;**

