Given:
Curve Left

| $\Delta$ | = $27^{\circ} 54^{\prime} 27^{\prime \prime}$ |  |
| :---: | :---: | :---: |
| R | = 1384.96 |  |
| ROW | = 600' | ( 300' ${ }^{300}$ ) |
| PC | $=5+87.89$ |  |
| PC to | $\mathrm{PI} \quad=\mathrm{N} 1$ | 59'46"E |

Find:

1) The central angle (alpha) between stations $8+50$ and $9+50$ on the outside the ROW.
2) Calculate the outside ROW actual arc distance between $8+79.40$ and $10+69.91$.
3) Calculate for the inside ROW the sub-chord (SC) between stations $6+11.42$ and $11+02.47$.
4) Calculate the sub-chord bearing between $7+50$ and $10+50$ on the outside ROW.
5) Calculate the station of the POC for which the sub-chord bearing is North from the PC on the inside ROW.
6) For the outside ROW, $\mathrm{TO}=170.43$ '. What is the POC station?
7) Calculate for the inside ROW:

STA H angle RT HD
Instr. 9+25
BS 8+00
FS 10+75

