

Topographie

- Angle de sommet; la flèche, contre flèche, corde, Développement, Tangente.

Exercice 01.

A /

B /

$$R = 500m$$

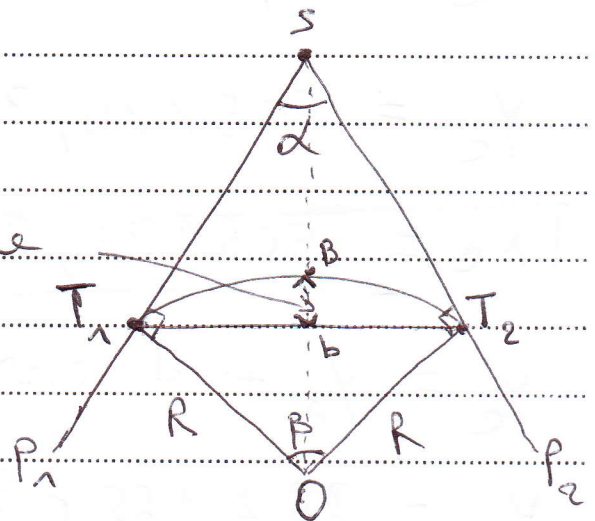
$$\alpha = 80gr$$

$$\hat{\beta} = 400 - 100 - 100 - \alpha$$

$$\hat{\beta} = 400 - 200 - 80$$

$$\boxed{\hat{\beta} = 120gr}$$

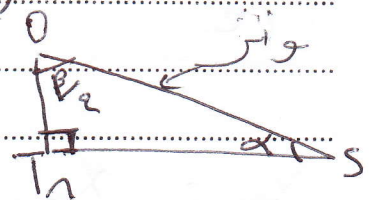
flèche



$$\tan\left(\frac{\alpha}{2}\right) = \frac{OT_1}{ST_1} \Rightarrow ST_1 = \frac{OT_1}{\tan\left(\frac{\alpha}{2}\right)}$$

$$ST_1 = \frac{500}{\tan\left(\frac{80}{2}\right)} = 688,19m$$

$$ST_1 = ST_2 = 688,19m \text{ (même rayon)}$$



- le Développement D:

$$D = \frac{\pi \cdot R \cdot \beta}{200} = \frac{\pi \cdot 500 \cdot 120}{200} = 942,47m$$

$$942m \text{ } \pi = 3,14$$

- la flèche F:

$$F = R - Ob$$

$$\cos \frac{\beta}{2} = \frac{Ob}{R} \Rightarrow Ob = \cos \frac{\beta}{2} \cdot R = 253,8926m$$