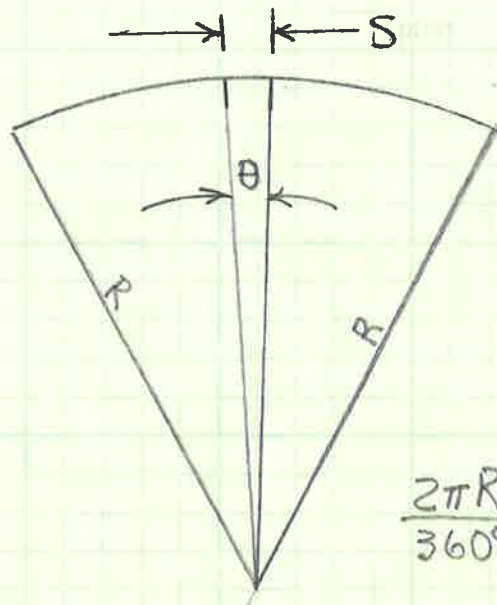


HW #5

Level Vial

$$S = 2 \text{ mm} = 0.002 \text{ m}$$

$$R = 40.4 \text{ m}$$

$$\theta = ?$$

$$\frac{2\pi R}{360^\circ} = \frac{S}{\theta}$$

$$\theta = \frac{S (360^\circ)}{2\pi R}$$

$$= \frac{(0.002 \text{ m}) (360^\circ)}{2\pi (40.4 \text{ m})}$$

$$= 0.002836^\circ$$

$$\times 60' / 1^\circ$$

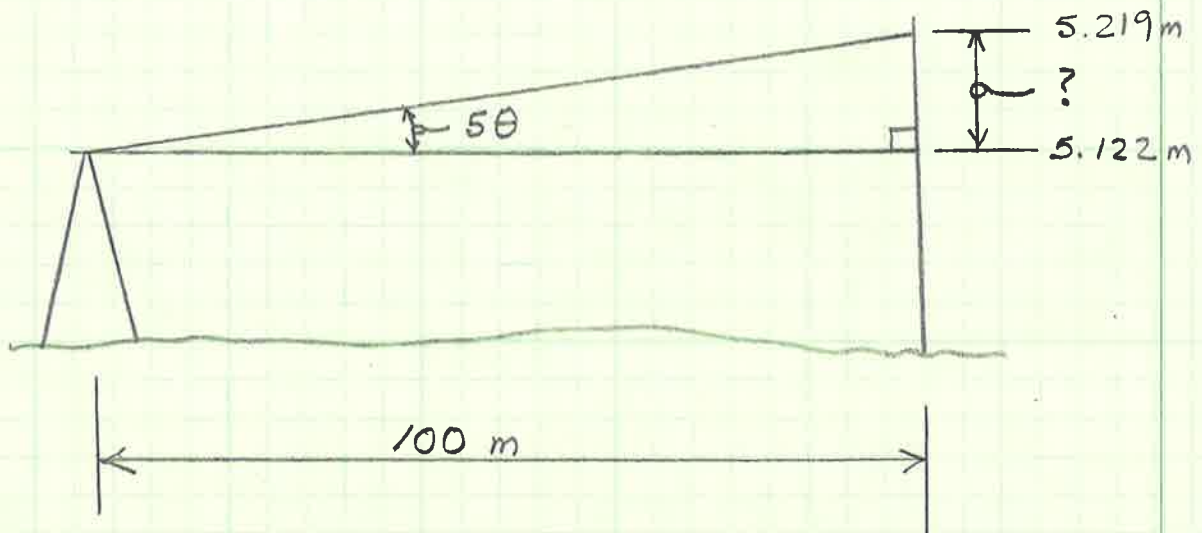
$$0.1702'$$

$$\times 60'' / 1'$$

$$10.2''$$

$$\theta = 10''$$

Partial Solution to HW# 6



Level
Vial

$\left\{ \begin{array}{l} \theta = ? \quad \text{Solve for } \theta \text{ above} \\ S = 2\text{ mm} = 0.002\text{ m} \\ R = ? \end{array} \right.$