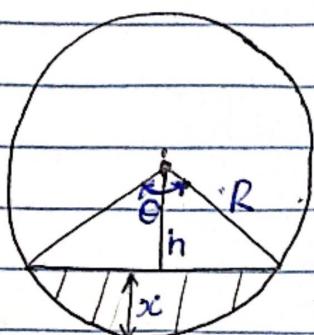
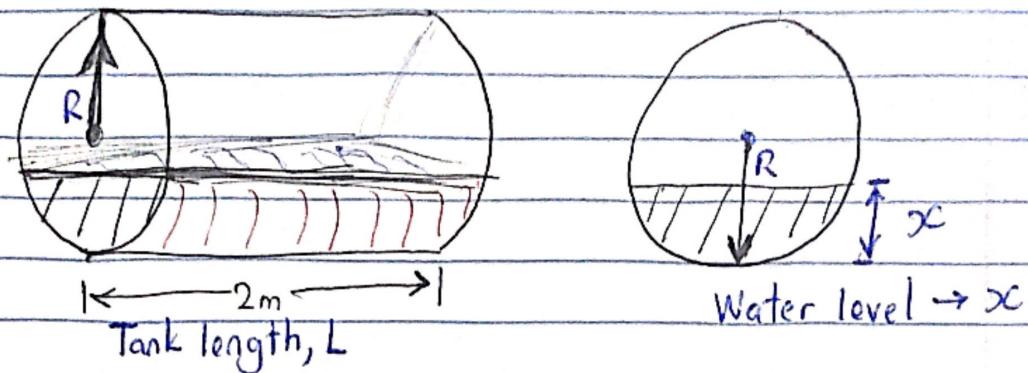


Radius, $R = 1\text{m}$



$$R - x = h$$

$$\cos\left(\frac{\theta}{2}\right) = \frac{R-x}{R}$$

$$\theta = 2 \cos^{-1}\left(\frac{R-x}{R}\right)$$

Since we're working with radians:

$$A_{\text{sector}} = \frac{1}{2} R^2 \theta$$

$$A_{\text{triangle}} = \frac{1}{2} R^2 \sin(\theta)$$

$$A_{\text{segment}} = A_{\text{sector}} - A_{\text{triangle}}$$

$$A_{\text{segment}} = \frac{1}{2} R^2 (\theta - \sin \theta)$$

Volume of tank:

$$V = A \times L$$

Conversion to liters:

$$V_{\text{liters}} = V_{\text{m}^3} \times 1000$$