



Given : θ, x, L_1, L_2, h

$$D = \sqrt{L^2 + h^2}$$

$$L = \frac{x}{\cos(\theta)}$$

$$\theta_1 = \arccos\left(\frac{D^2 - L_1^2 - L_2^2}{-2(L_1)(L_2)}\right)$$

$$\theta_2 = \frac{L_2^2 - L_1^2 - D^2}{-2(L_1)(D)}$$

$$\theta_3 = \arctan\left(\frac{L}{h}\right)$$

$$h = 45 \text{ mm}$$

$$L_1 = 40 \text{ mm}$$

$$L_2 = 62 \text{ mm}$$

$$x = 50 \text{ mm}$$