

$$A = 3$$

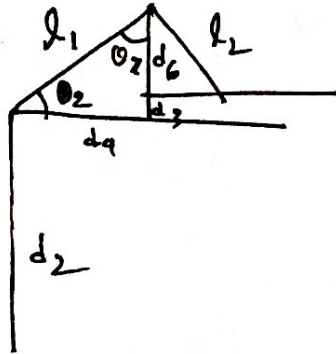
$$B = 7$$

$$C = 7$$

$$\theta_1 = 30^\circ$$

$$\theta_2 = 70^\circ$$

$$\theta_3 = 70^\circ$$



$$\sin \theta_2 = \frac{d_3}{l_1}$$

$$\Rightarrow d_3 = l_1 \times \sin \theta_2$$

$$= 26 \times \sin 70^\circ$$

$$\boxed{d_3 = 24.43}$$

$$\cos \theta_2 = \frac{d_4}{l_1}$$

$$d_4 = l_1 \times \cos \theta_2$$

$$\Rightarrow d_4 = 26 \times \cos 70^\circ$$

$$\boxed{d_4 = 8.89}$$

$$\theta_x = 180^\circ - 90^\circ - 70^\circ$$

$$= 20^\circ$$

$$\theta_y = \theta_3 - \theta_x = 70^\circ - 20^\circ$$

$$= 50^\circ$$

$$\cos \theta_y = \frac{d_6}{l_2}$$

$$d_6 = l_2 \times \cos \theta_y$$

$$= 20 \times \cos 50^\circ$$

$$\boxed{d_6 = 12.86}$$

$$\sin \theta_y = \frac{d_5}{l_2}$$

$$d_5 = l_2 \times \sin \theta_y$$

$$= 20 \times \sin 50^\circ$$

$$\boxed{d_5 = 15.32}$$

$$z = 32 + 24.43 - 20$$

$$= 36.43$$

$$\cos \theta_1 = \frac{x}{d_4 + d_5 + l_3}$$

$$\Rightarrow x = 20 \cdot 966$$

$$\sin \theta_1 = \frac{y}{d_4 + d_5 + l_3}$$

$$\therefore y = 12.105$$

$$A = 3 \text{ m}$$

$$B = 7 \text{ m}$$

$$C = 7 \text{ m}$$

$$d_1 = \sqrt{3^2 + 7^2} = 7.62$$

$$\theta_1 = \cos^{-1} \frac{3}{7.62} = 66.82$$

$$d_c^2 = d_1^2 + (z - d_c)^2$$

$$d_6 = 26.14$$

$$\theta_7 = \cos^{-1} \frac{d_1}{d_6}$$

$$= 73.05$$

$$\theta_3 = \cos^{-1} \frac{l_1^2 + l_2^2 - d_6^2}{2l_1 \cdot l_2} = 67.86$$

$$\theta_6 = \cos^{-1} \frac{h_1^2 + d_6^2 - h_2^2}{2h_1 \cdot d_6}$$

$$= 45.11$$

$$\theta_2 = \theta_6 + \theta_7$$

$$= 118.18$$