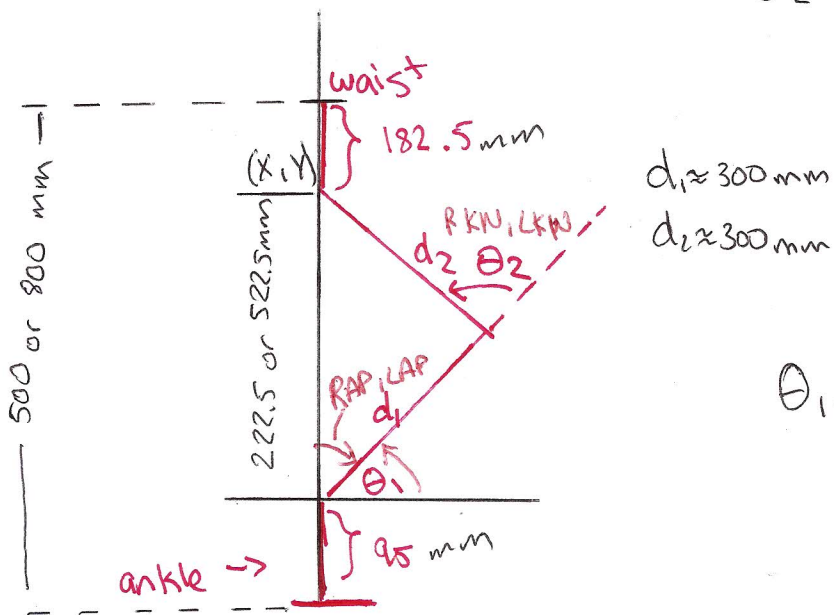


$$\theta_2 = \cos^{-1} \left[\frac{x^2 + y^2 - d_1^2 - d_2^2}{2 d_1 d_2} \right]$$



$$\theta_1 = \tan^{-1} \left[\frac{y(d_1 + d_2 \cos \theta_2 - x(d_2 \sin \theta_2))}{x(d_1 + d_2 \cos \theta_2 + y d_2 \sin \theta_2)} \right]$$

5 meters

$$x = 0$$

$$y = 222.5 \text{ mm}$$

$$\theta_2 = \cos^{-1} \left[\frac{y^2 - d_1^2 - d_2^2}{2 d_1 d_2} \right]$$

θ_2

$$\theta_2 = 2.38$$

$$\theta_1 = \tan^{-1} \left[\frac{y(d_1 + d_2 \cos \theta_2)}{\cancel{x(d_1 + d_2 \cos \theta_2)} + y d_2 \sin \theta_2} \right]$$

8 meters

$$x = 0$$

$$y = 522.5$$

$$\theta_2 = 1.0298$$

$$\theta_1 = 1.056 \therefore$$

$$\theta_{RAP, LAP} = -0.514$$

$$\theta_{RKN, LKN} = 1.0298$$

$$\theta_{RHP, LHP} = 0.514$$

$$\theta_{RAP, LAP} = -1(\pi/2 - \theta_1)$$

$$\theta_1 = .38 \therefore$$

$$\theta_{RAP, LAP} = -1.189$$

$$\theta_{RKN, LKN} = 2.38$$

$$\theta_{RHP, LHP} = -1.189$$