

Dik:

- $L_1 = 26(\text{femur})$
- $L_2 = 69(\text{tibia})$
- $\theta_1 = 40^\circ$
- $\theta_2 = 30^\circ$

Dit: Forward Kinematics?

Rumus

$$x = L_1 \cos \theta_1 + L_2 \cos(\theta_1 + \theta_2)$$

$$y = L_1 \sin \theta_1 + L_2 \sin (\theta_1 + \theta_2)$$

Jawab:

- $x = 26 \cos (40^\circ) + 69 \cos (40^\circ + 30^\circ)$   
 $y = 26 \sin (40^\circ) + 69 \sin (40^\circ + 30^\circ)$
- $x = 26 \cos (40^\circ) + 69 \cos (70^\circ)$   
 $y = 26 \sin (40^\circ) + 69 \sin (70^\circ)$
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 $y = 26 \sin (40^\circ) + 69 \sin (70^\circ)$
- $x = 26 (0.766044443118978) + 69 (0.3420201433256688)$   
 $y = 26 (0.6427876096865393) + 69 (0.9396926207859083)$
- $x = 19.917155521093427 + 23.599389889471148$   
 $y = 16.71247785185002 + 64.83879083422768$
- $x = 43.516545410564575$   
 $y = 81.5512686860777$

**Hasil akhir**

$$(x,y) = (43.5165, 81.5513)$$