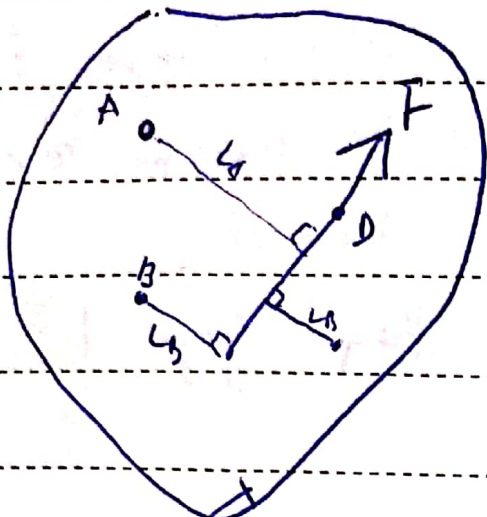
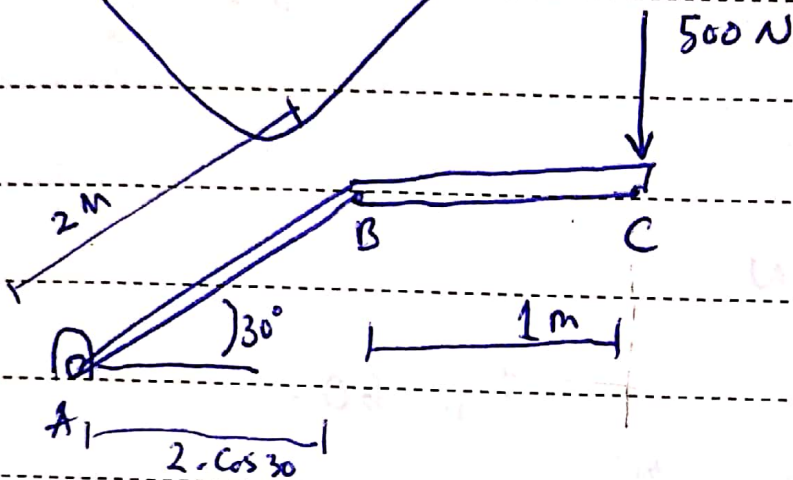


Moment of Force

$$M_A = F \cdot L_A \quad \text{ccw or } \curvearrowright$$



M_A di semua momen berbeda
tipe F



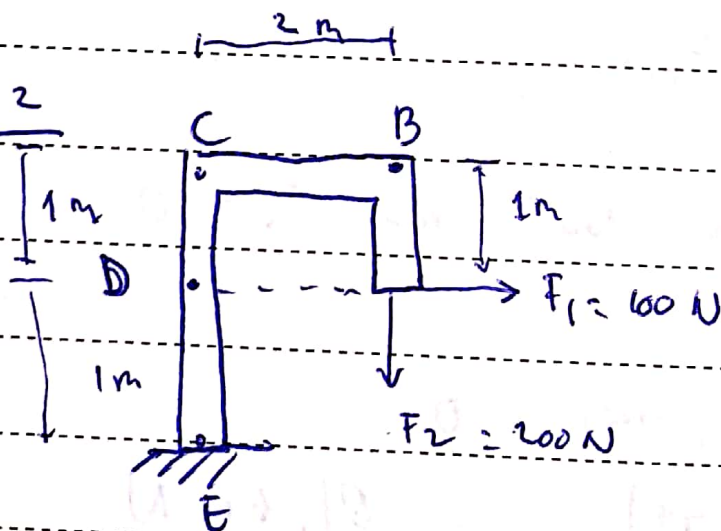
$$M_A = ?$$

$$M_B = ?$$

$$\curvearrowright M_B = 500 \times 1 = 500 \text{ N.m}$$

$$M_A = 500 \times (2 \cdot \cos 30 + 1) = 1366,03 \text{ N.m}$$

Example 2



$$M_D, M_C, M_B \text{ \& } M_E = ?$$

$$\curvearrowright M_B = F_1 \cdot 1$$

$$\curvearrowright M_B = (100 \times 1) + (200 \times 0) = 100 \text{ N.m}$$

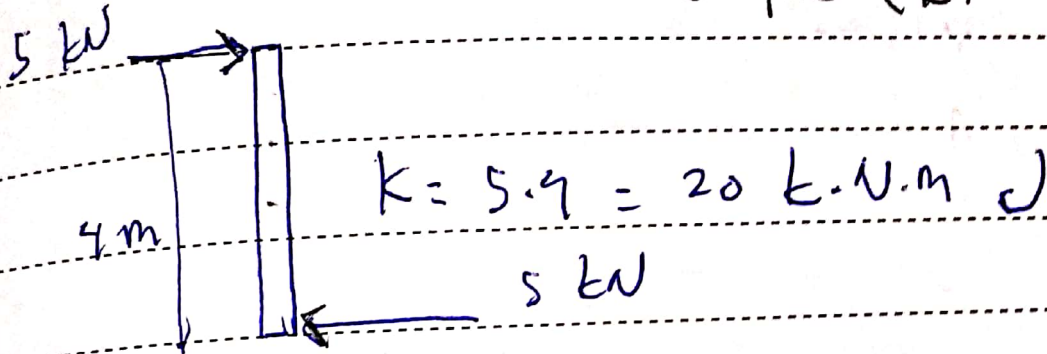
$$\curvearrowright M_C = (100 \times 1) - (200 \times 2) = -300 \text{ N.m}$$

$$\uparrow \curvearrowright M_D = (100 \times 0) - (200 \times 2) = -400 = 400 \text{ N.m}$$

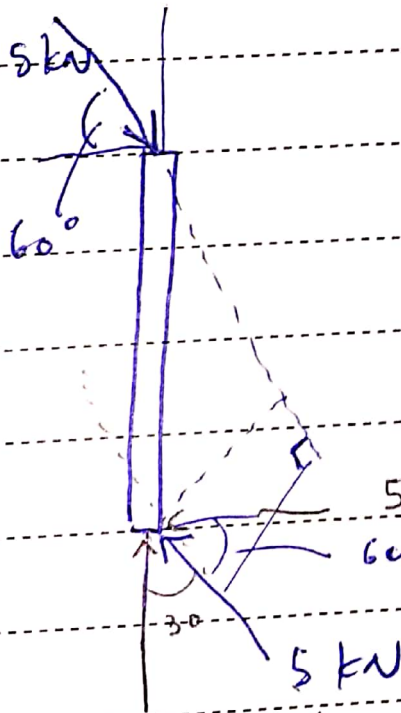
$$\uparrow \curvearrowright M_E = -(100 \times 1) - (200 \times 2) = -500 = 500 \text{ N.m}$$

Example 3

Couple (k)



Example 4



Cara 1: uraian menjadi F_x & F_y

Cara 2: Cari jarak tegak lurus.

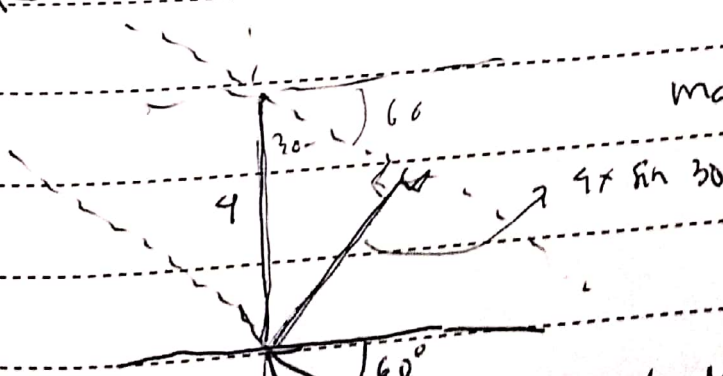
Cara 1:

$$5 \cdot \cos 30$$

$$\uparrow \curvearrowright 5 \cdot \sin 30 \times 9 = k \quad \therefore k = 10 \text{ kN}$$

Cara 2:

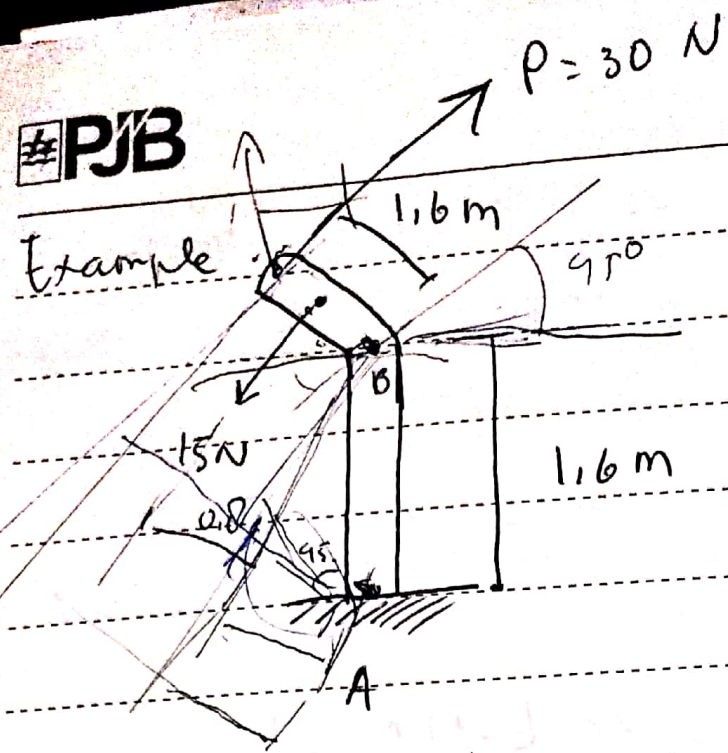
$$\text{maka } k = 5 \times (9 \cdot \sin 30) = 10 \text{ kN}$$



... Listrik Terpercaya Kini dan Mendatang

PJB

Example



$$\begin{aligned} \curvearrowright M_B &= 30 \cdot 1.6 - 15 \cdot (0.8) \\ &= 36 \text{ N.m} \end{aligned}$$

$$\begin{aligned} \curvearrowright M_A &= 30 (1.6 + 1.6 \cdot \cos 45) - 15 \cdot (0.8 + 1.6 \cos 45) \\ &= 52.98 \text{ N.m} \end{aligned}$$

