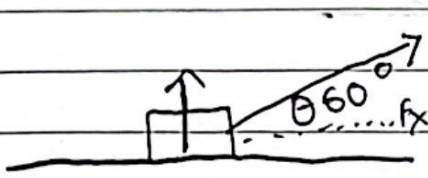


Kamis, 09/12/2021

No. / /
Date. / /

Nama : Paulus. M. J. Rayar
Kelas : X MIPA 6.

1).



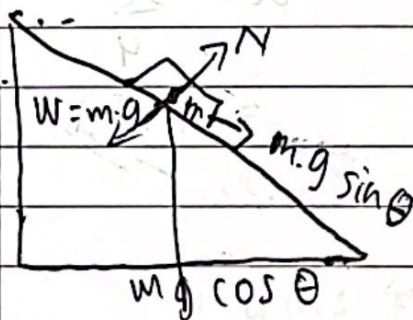
Dik = $T = 120 \text{ N}$
 $\theta = 60^\circ$

Dit = $F_x = \dots$

Jawab :

$$F_x = F \cos \theta$$
$$= 120 \cos 60^\circ$$
$$= 120 \cdot \frac{1}{2}$$
$$= 60 \text{ N}$$

2).



Dik = $M = 2 \text{ kg}$
 $\theta = 30^\circ$

Dit = $a = \dots$

Jawab :

$$\sum F = m \cdot a$$
$$m \cdot a = \frac{\sum F}{m}$$

estudeer

$$= \frac{f - m \cdot g \sin \theta}{m}$$

$$= \frac{0 - 2 \times 10 \times \sin 30}{2}$$

$$a = \frac{-2 \times 10 \times \frac{1}{2}}{2}$$

$$= -5 \text{ m/s}^2$$

3. dik : $m_1 = 1 \text{ kg}$
 $m_2 = 3 \text{ kg}$
 $g = 10 \text{ m/s}^2$

- dit : a. Percepatan benda
b. Tegangan tali kedua benda

Peny :

a. a...?

$$m \cdot a = \sum f$$

$$(m_1 + m_2) \cdot a = W_2 \cdot F$$

$$4 \cdot a = 30 \times 10$$

$$4a = 300$$

$$(1+3)a = 30 - 0$$

$$4a = 30$$

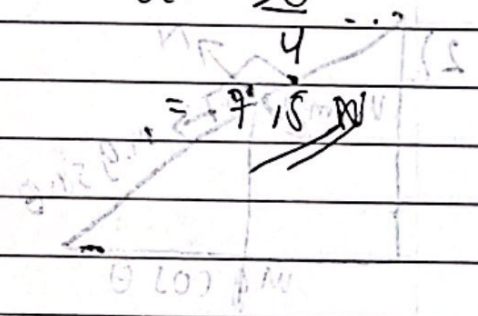
$$a = \frac{30}{4}$$

b. Tegangan tali

$$T = W_2 - m_2 \cdot a$$

$$= 30 - (3) (7.5)$$

$$= 7.5 \text{ N}$$



4. dik

$$m_1 = 2$$

$$m_2 = 3$$

$$g = 10 \text{ m/s}$$

dit: a. percepatan benda? ..?

b. Tegangan Tali ..?

peny: a. a...?

$$a = \frac{m_2 - m_1}{m_1 + m_2} \cdot g$$

$$= \frac{3 - 2}{2 + 3} \times 10$$

$$= \frac{1}{5} \times 10$$

$$= 2 \text{ m/s}$$

$$= 2 \text{ m/s}$$

b. ...?

$$T = \frac{2 m_1 \cdot m_2 \cdot g}{m_1 + m_2}$$

$$= \frac{2 \cdot 2 \cdot 3 \cdot 10}{2 + 3}$$

$$= \frac{12 \cdot 10}{5}$$

$$= \frac{12 \cdot 10}{5} = 24 \text{ N}$$