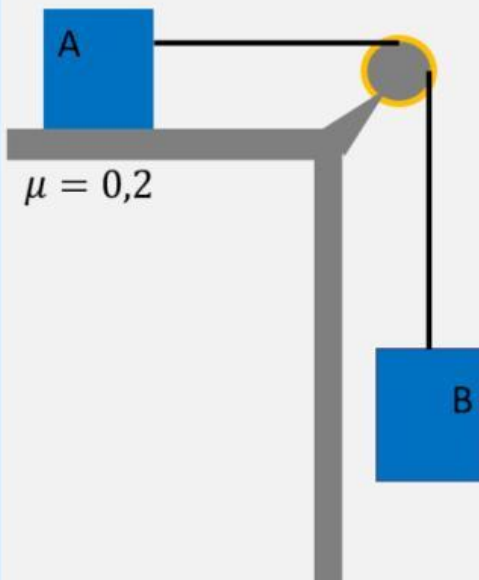


Dinamika Gerak

Paada Katrol dengan bidang kasar

Buatlah diagram bebas (gaya-gaya yang bekerja) pada sistem katrol di bawah. Kemudian, lengkapi jawaban di bawah ini !



$m_A = 3\text{kg}$ $a = ?$
 $m_B = 1\text{kg}$ $T = ?$
 $g = 10\text{m/s}^2$

$$\sum F_{\text{sistem}} = m_{\text{sistem}} a$$

$$w_B - T + T - f_A = (m_1 + m_2) a$$

$$- = (m_1 + m_2) a$$

$$(m_B \cdot g) - (\mu \cdot) = (m_1 + m_2) a$$

$$() - (\mu \cdot w_A) = (m_1 + m_2) a$$

$$() - () = () a$$

$$= () a$$

$$a = \quad \text{m/s}^2$$

Menentukan tegangan tali

Tinjau salah satu benda



$$\sum F = m_B a$$

$$w_B - = a$$

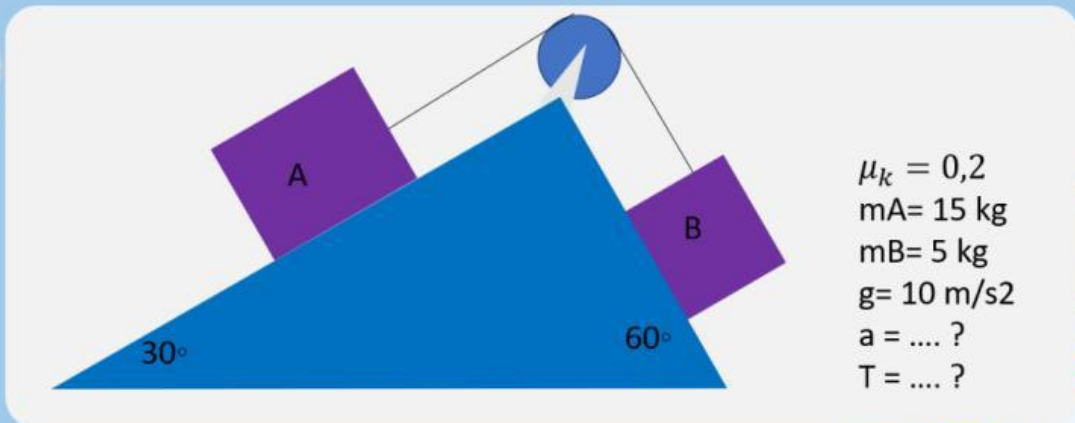
$$T = - a$$

$$T = N$$

Dinamika Gerak

Pada Katrol dengan bidang kasar

Buatlah diagram bebas (gaya-gaya yang bekerja) pada sistem katrol di bawah. Kemudian, lengkapi jawaban di bawah ini !



$$\sum F_{\text{sistem}} = m_{\text{sistem}} a$$

$$w_A \sin \theta - f_A - w_B \sin \theta - f_B - T + T = (m_A + m_B) a$$

$$w_A \sin \theta - \mu(N_A) - w_B \sin \theta - \mu(N_B) = (\quad) a$$

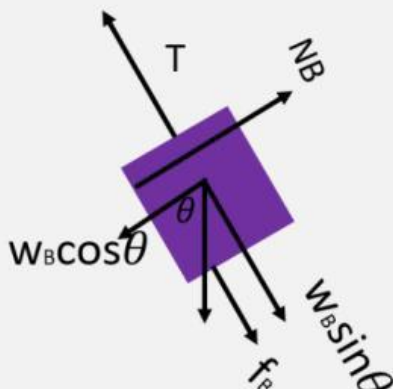
$$\sin 30^\circ - 0,2(\quad \cos 30^\circ) - \sin 60^\circ - 0,2(\quad \cos 60^\circ) = (\quad) a$$

$$-15\sqrt{3} - 25\sqrt{3} - \quad = (\quad) a$$

$$= (\quad) a$$

$$a = \quad \text{m/s}^2$$

Menentukan tegangan tali : Tinjau salah satu benda



$$\sum F = m_B a$$

$$T - w_B \sin \theta - f_B = m_B a$$

$$T - \sin 60^\circ - \mu(N_B) =$$

$$T - 25\sqrt{3} - 0,2(\quad \cos \theta) =$$

$$T - 25\sqrt{3} - 0,2(\quad \cos \theta) =$$

$$T - 25\sqrt{3} - \quad =$$

$$T = \quad \text{N}$$