SCiLAB
SMART SCIENCE LABORATORY

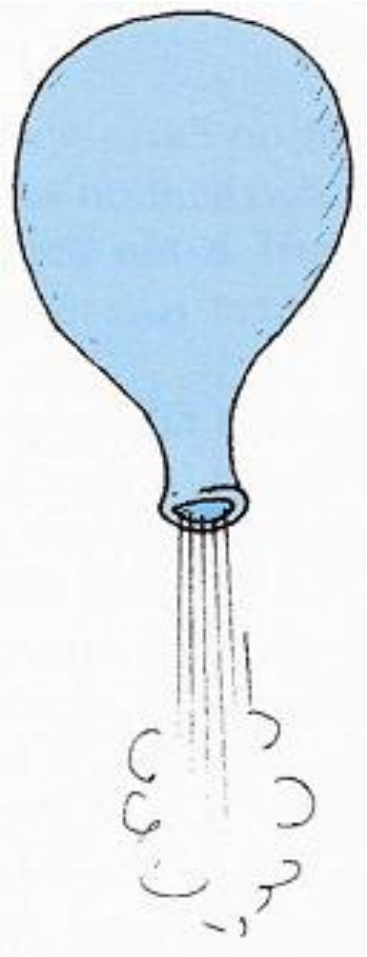
HUKUM NEWTON

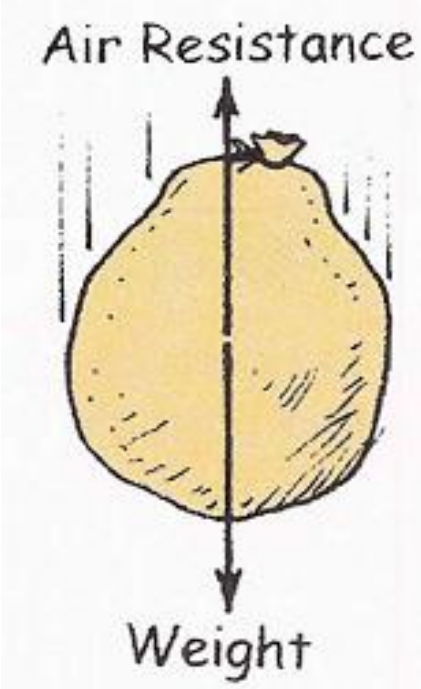
SMA KARTIKA XIX 1 BANDUNG

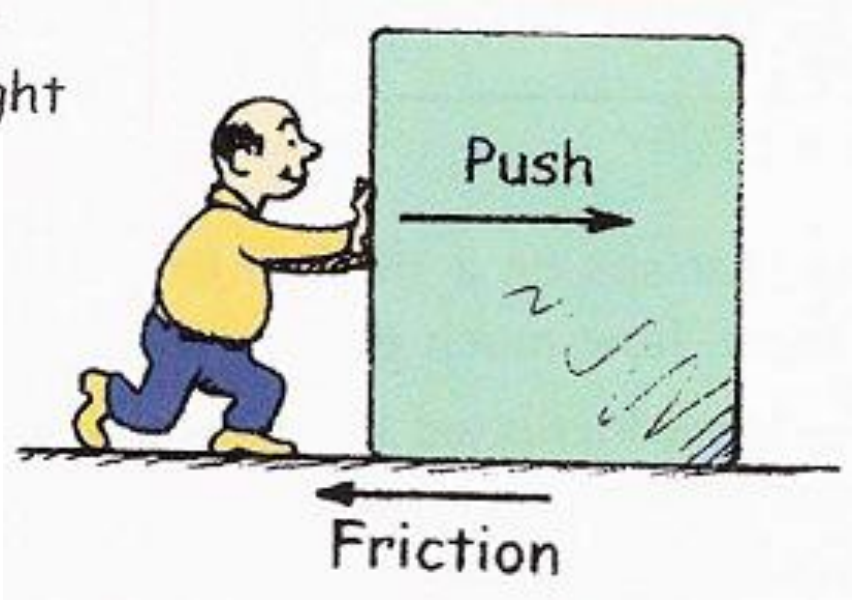
LINGKAR-2023

Septhy Dwi Jayanthy

Jenis-jenis Gaya

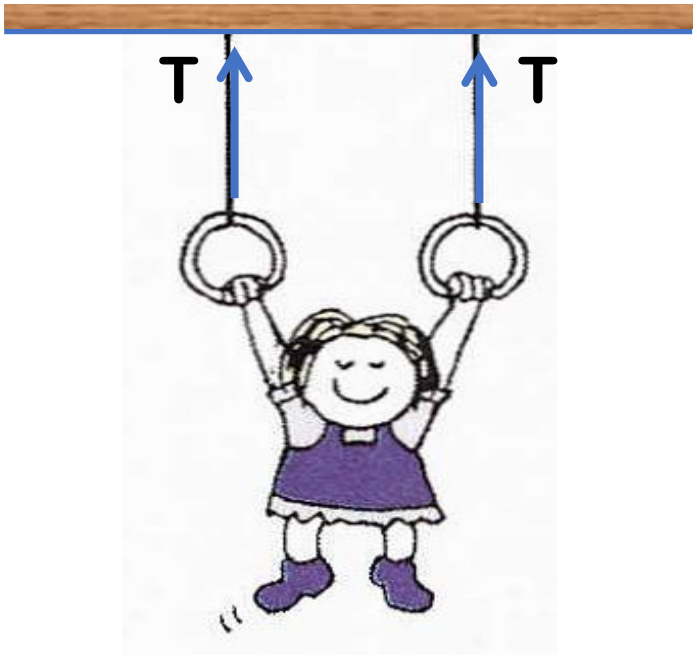






Gaya Tegangan tali : T

Gaya gesek : f



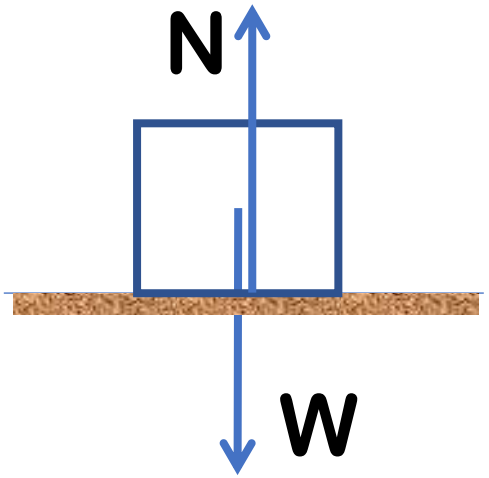
Gaya gesek = f

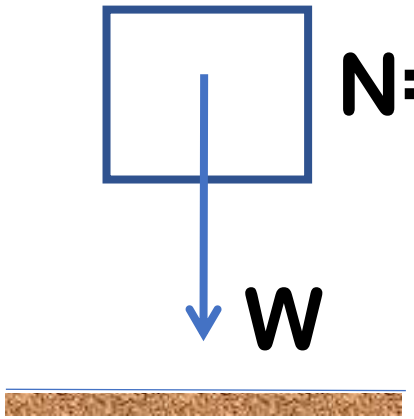
Gaya Berat : W

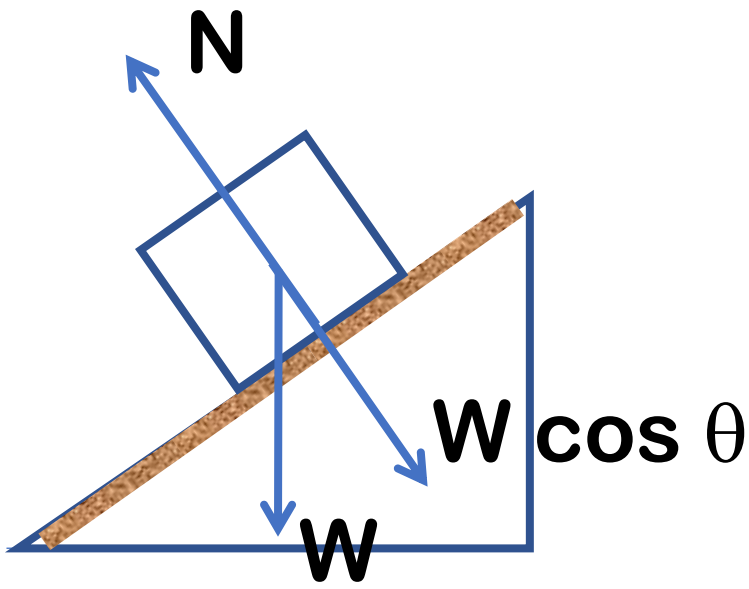
Gaya Normal : N

$$N = w \cos \theta$$

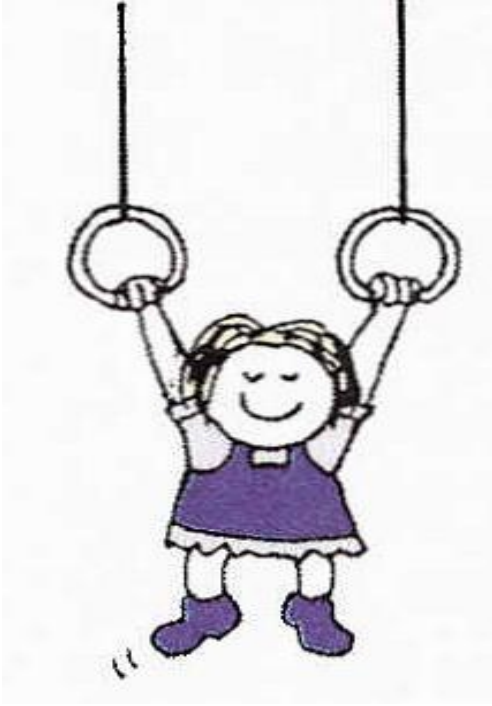
$$N = w$$







Hukum 1 Newton



Disebut juga

Hukum Kelembaman, yaitu :

"kecenderungan benda untuk mempertahankan keadaan awalnya"

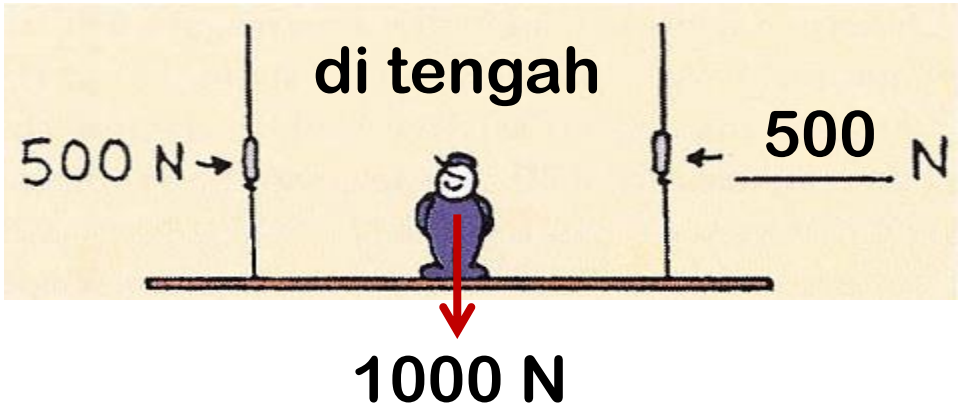
Dinyatakan dengan :

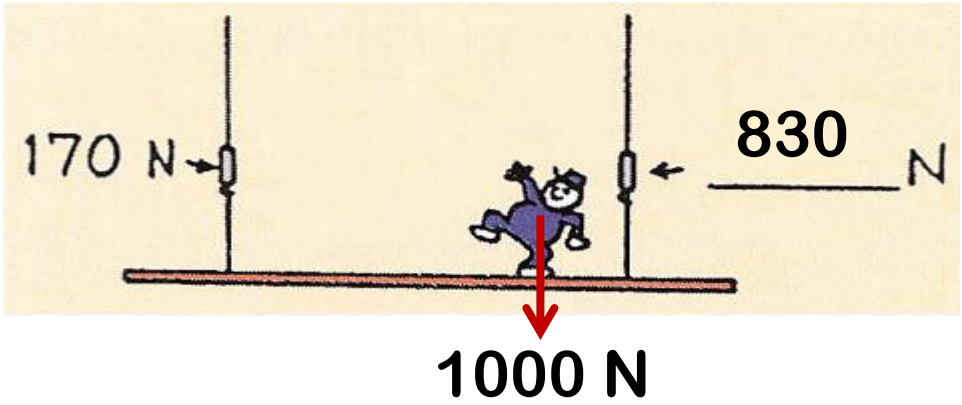
$$\sum F = 0$$

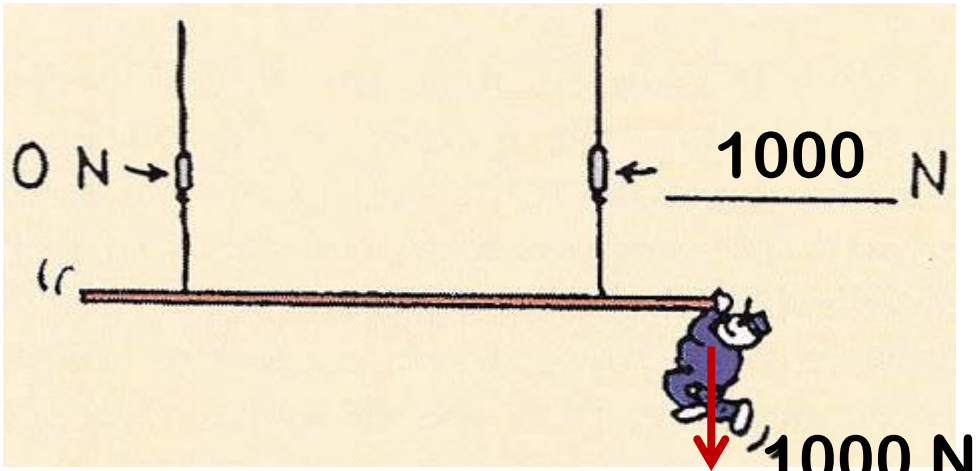
Resultan gaya yang bekerja pada suatu benda adalah nol

Ilustrasi

$$\sum F = 0$$







Hukum 2 Newton

"Percepatan pada sebuah benda sebanding dengan resultan gaya yang bekerja pada benda tersebut"

$$\sum F = m \cdot a$$

Keterangan:

F = Gaya (Newton)

M = Massa (kg)

a = Percepatan (m/s^2)

Hukum 3 Newton

$$F_{aksi} = -F_{reaksi}$$