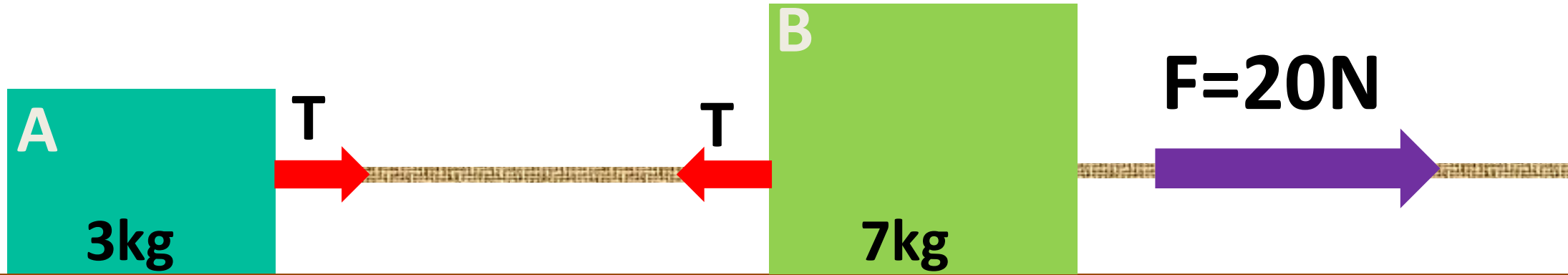


# Elevadores

**Prof. Jadoski**  
Física

$$F = m \cdot a$$

Lembram dos blocos que se puxam?



**GERAL**

$$F = m \cdot a$$
$$20 = 10 \cdot a$$
$$a = 2\text{m/s}^2$$

**INDIVIDUAL**

**A**

$$F = m \cdot a$$
$$T = 3 \cdot 2$$
$$T = 6\text{N}$$

**B**

$$F = m \cdot a$$
$$F - T = m \cdot a$$
$$20 - T = 7 \cdot 2$$
$$T = 6\text{N}$$

Lembram dos blocos que se puxam?

Se eu te disser que o bloco sobe com  $a=2\text{m/s}^2$ ?

GERAL

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

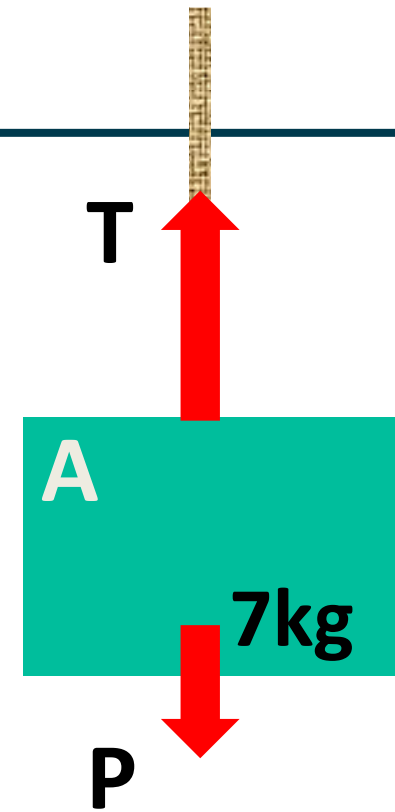
INDIVIDUAL

A

$$F = m \cdot a$$

$$T - P = m \cdot a$$

$$T - 70 = 7 \cdot 2$$



$$T = 84\text{N}$$

Um elevador é tipo um bloco...

Se eu te disser que o bloco **sobe**

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

GERAL

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

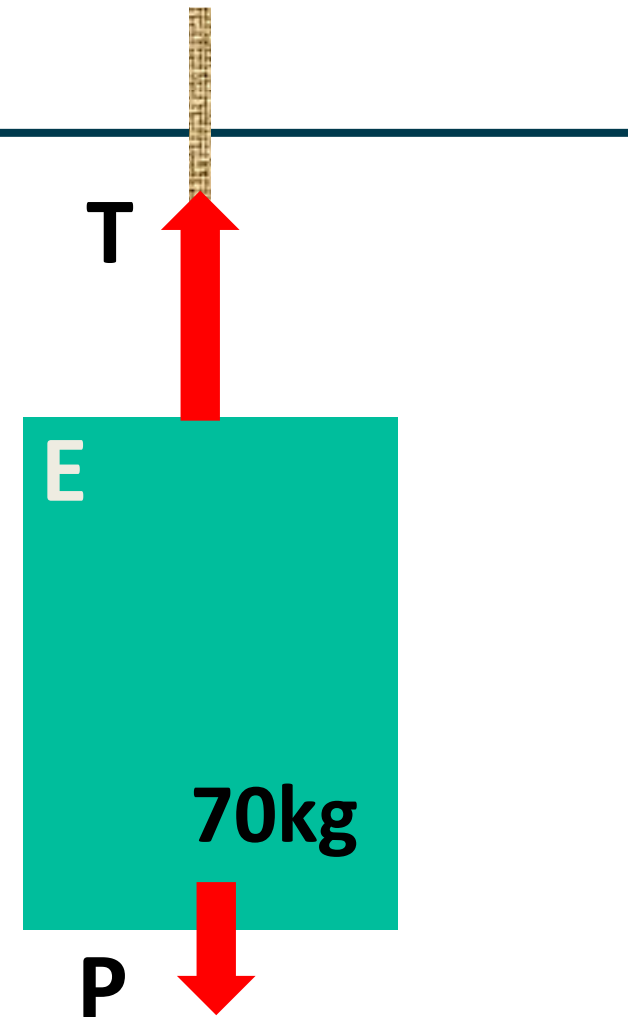
INDIVIDUAL

E

$$F = m \cdot a$$

$$T - P = m \cdot a$$

$$T - 700 = 70 \cdot 2$$



$$T = 840\text{N}$$

E se abrimos o elevador?

Se eu te disser que o bloco **sobe**

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

GERAL

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

INDIVIDUAL

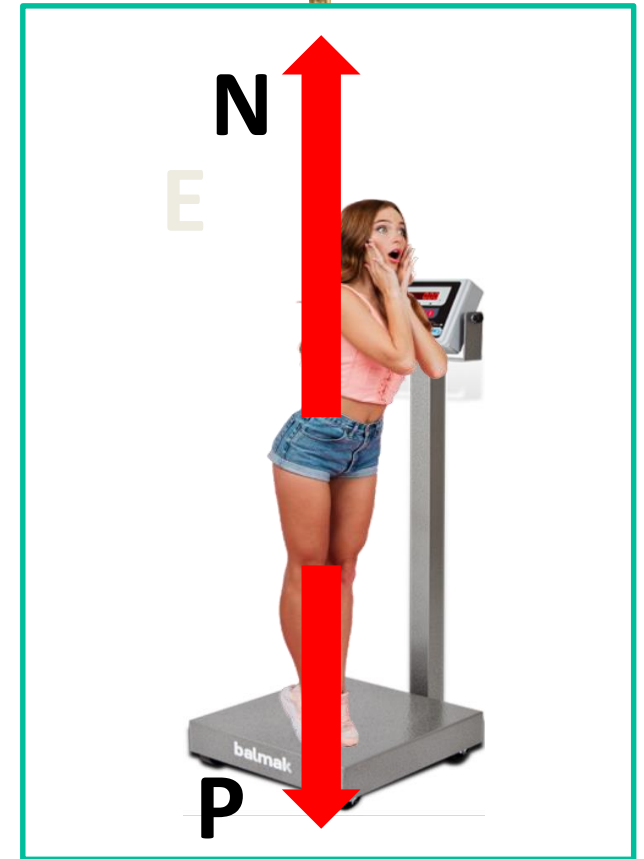
E

$$F = m \cdot a$$

$$N - P = m \cdot a$$

$$N - 500 = 50 \cdot 2$$

$$N = 600\text{N}$$



E se abrimos o elevador?

Se eu te disser que o bloco **desce**

com  $a = -2\text{m/s}^2$ ?

GERAL

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

INDIVIDUAL

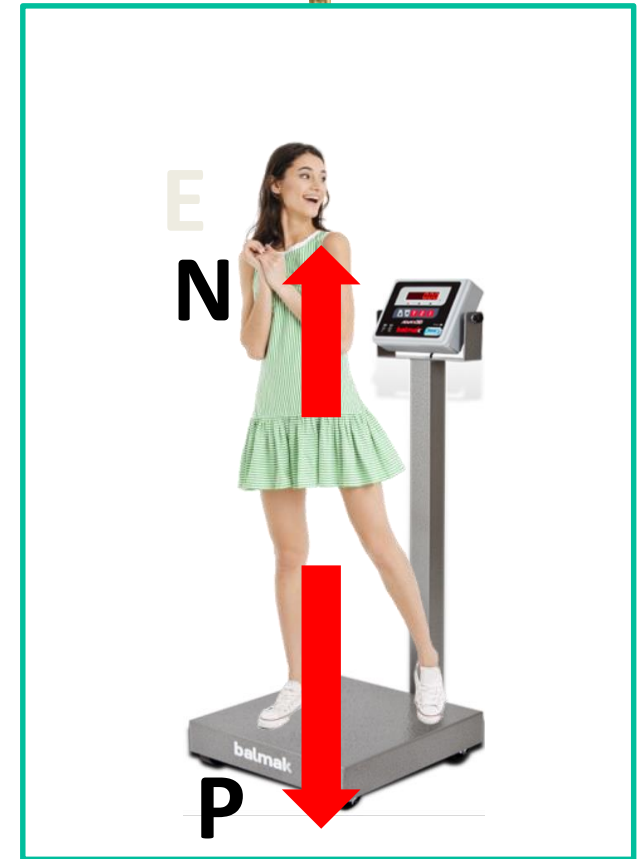
E

$$F = m \cdot a$$

$$P - N = m \cdot a$$

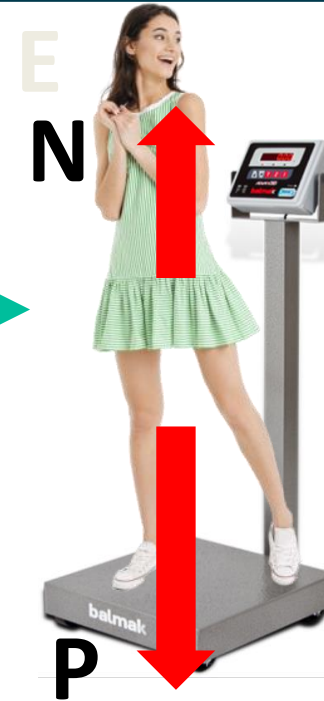
$$500 - N = 50 \cdot 2$$

$$N = 400\text{N}$$



# E quando é N-P ou P-N?

$$N - P = m \cdot a$$



$$P - N = m \cdot a$$



# Sistema de blocos caso do elevador

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Física