

$m^o \text{I}$

CANNONS

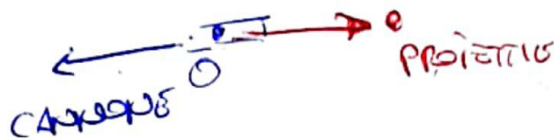
$$m_1 = 375 \text{ kg}$$

$$a_1 = ?$$

$$m_2 = 12 \text{ kg}$$

$$a_2 = 50 \frac{\text{m}}{\text{s}^2}$$

(A)



$$F_c = F_p$$

3° PR. DIN.

$$m_c \cdot a_c = m_p \cdot a_p$$

2° PR. DIN.

$$a_c = a_p \cdot \frac{m_p}{m_c} = 50 \frac{\text{m}}{\text{s}^2} \cdot \frac{12 \text{ kg}}{375 \text{ kg}} = 1,6 \frac{\text{m}}{\text{s}^2}$$

(B)

$$F_{\text{TOT}} = F_c + F_p = m_c a_c + m_p a_p$$

$$= 375 \text{ kg} \cdot 1,6 \frac{\text{m}}{\text{s}^2} + 12 \text{ kg} \cdot 50 \frac{\text{m}}{\text{s}^2} =$$

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