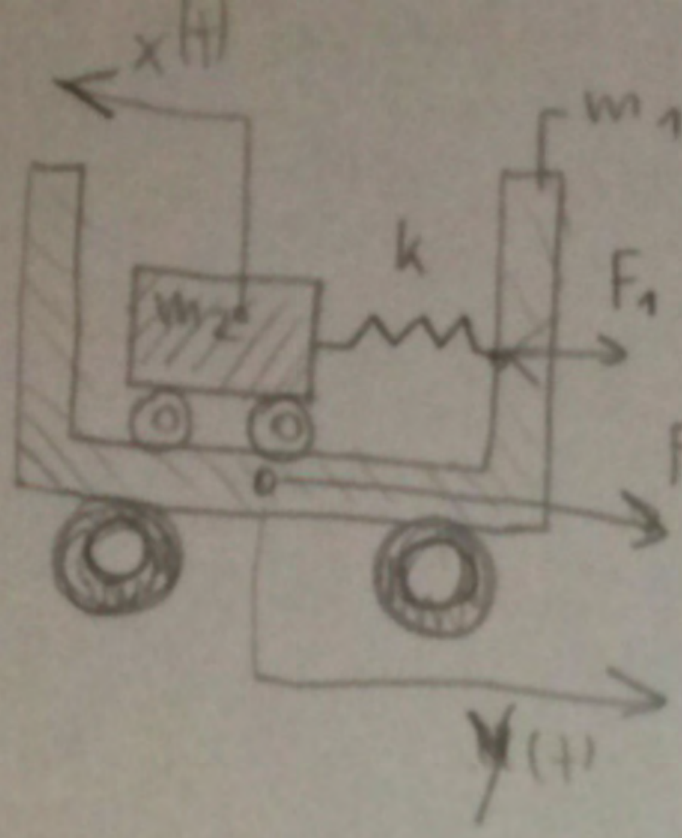


$\vec{a}$ $\quad |\vec{a}| = \frac{d^2 y(t)}{dt}$

$$m_1 \cdot \frac{d^2 y(t)}{dt} = F - F_1$$

$$m_2 \cdot \frac{d^2 y(t)}{dt} = k \cdot x + F_1$$

$$-F_1 = m_1 \frac{d^2 y(t)}{dt} - F$$

$$F_1 = k \cdot y + \frac{d^2 y(t)}{dt}$$

$$-m_1 \cdot \frac{d^2 y(t)}{dt^2} + F(t) = k \cdot y + \frac{d^2 y(t)}{dt} \cdot m_2$$

$WP = 0$

$$-m_1 \cdot Y \cdot s^2 + U = k \cdot Y + m_2 \cdot Y \cdot s^2$$

$$U = Y(m_1 \cdot s^2 + m_2 \cdot s^2 + k)$$

$$\frac{Y(s)}{U(s)} = \frac{1}{(m_1 + m_2)s^2 + k}$$