

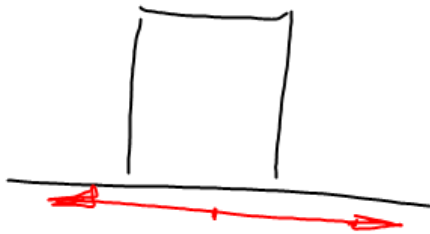
$$x(0) = 0.10$$

$$x'(0) = 0$$

$$2 \text{ EDO } h(z) \text{ cc } 4.$$

$$\frac{dx}{dt^2} + a_1 x = 0$$

$$m^2 + a_1 = 0 \quad m_{1,2} = \begin{cases} -\sqrt{a_1} i \\ \sqrt{a_1} i \end{cases}$$



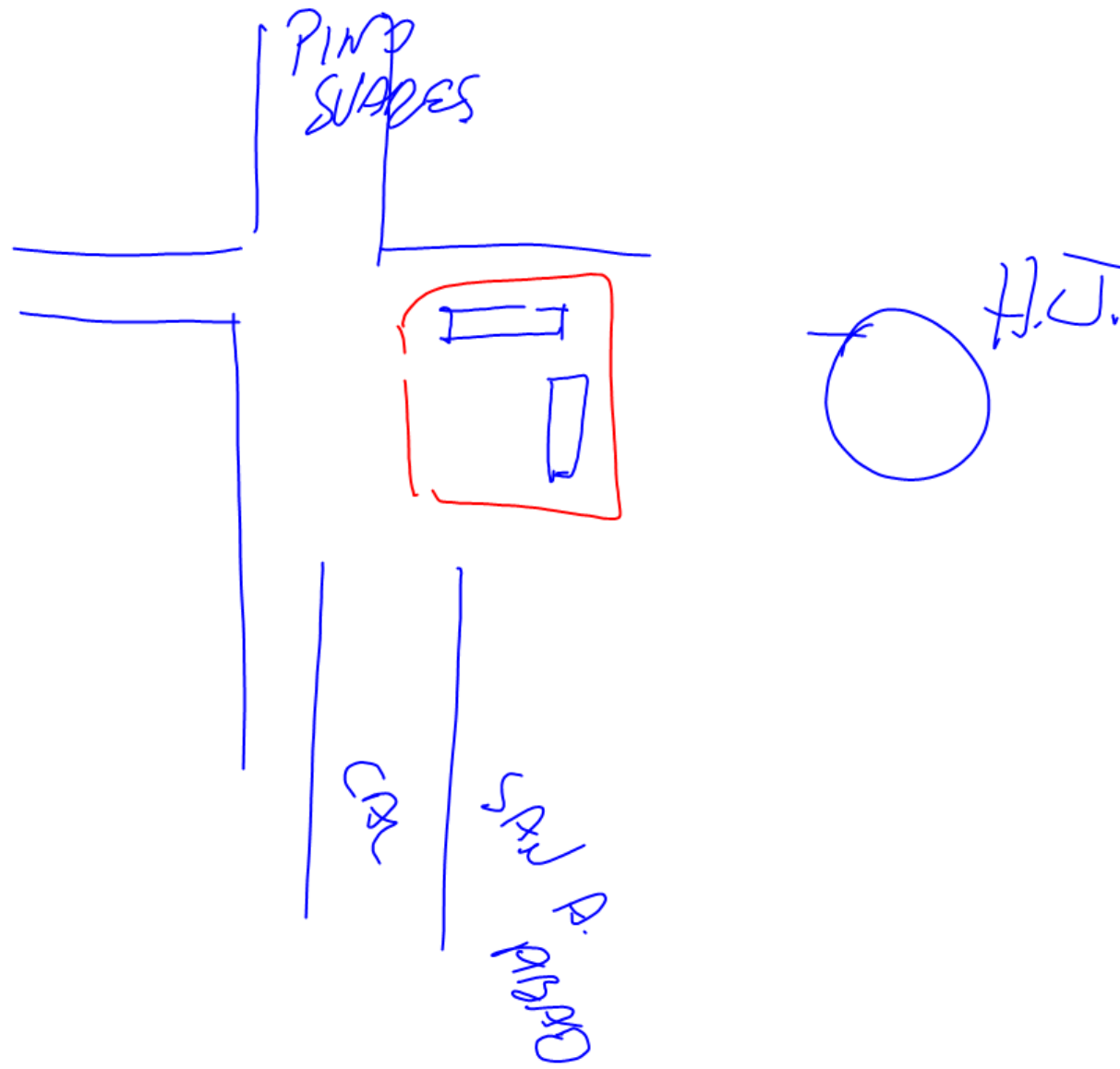
$$F_T = B \sin(\omega t)$$

$$d_T = 20 \text{ seg}$$

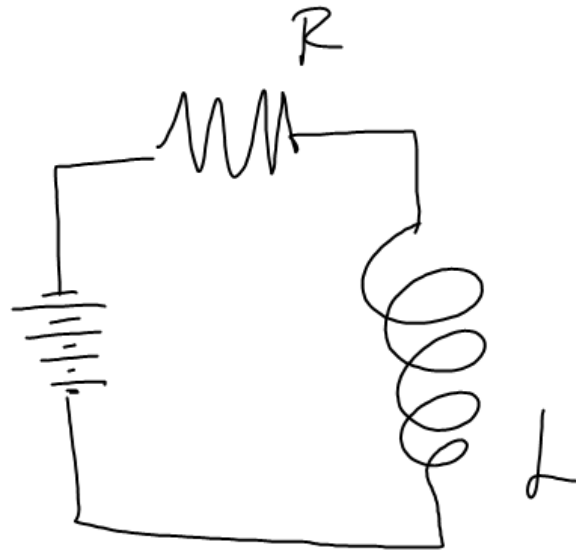
$$\frac{d^2 x}{dt^2} + a, x = F_T$$

EDO (2) L cc NH

RESONANCIA

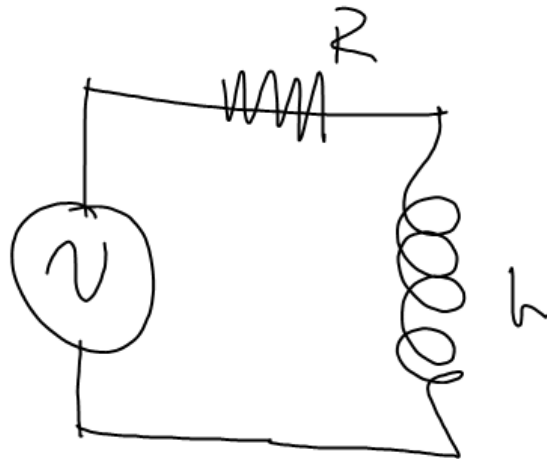


$$V = 12 \text{ V.}$$

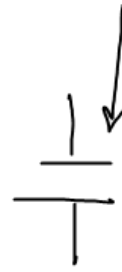
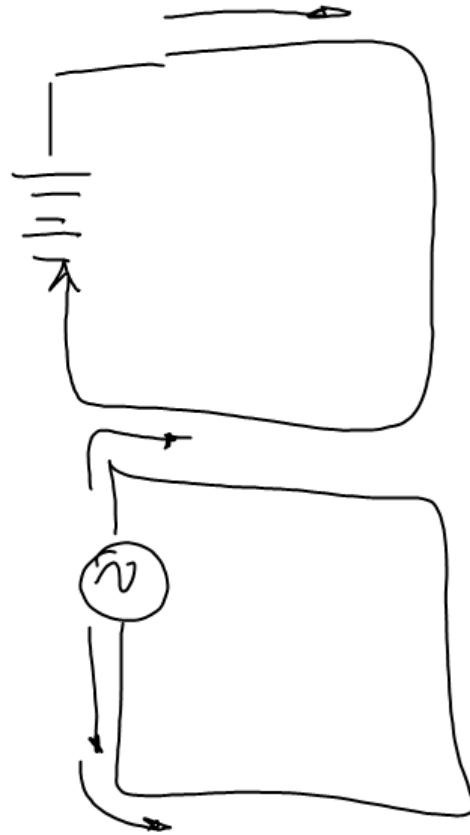


$$V = Ri + L \frac{di}{dt}$$

$$L \frac{di}{dt} + Ri = 12 \text{ V.}$$

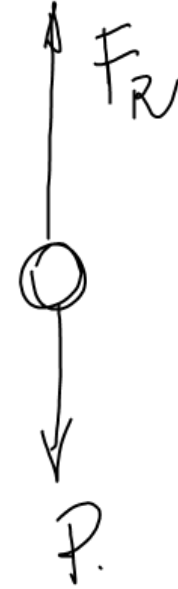
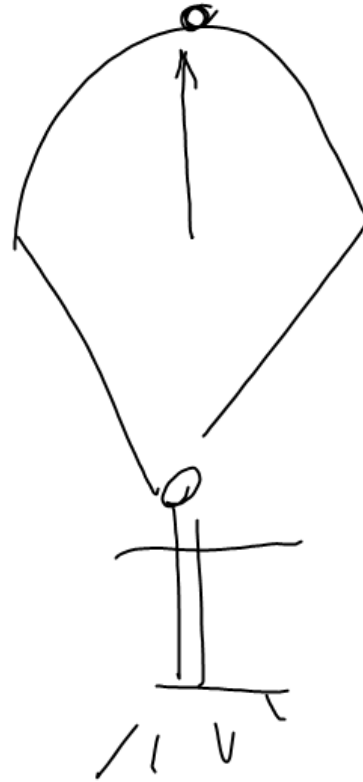


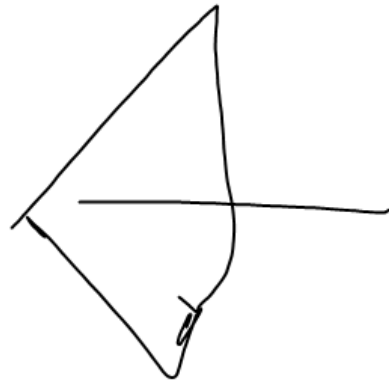
$$L \frac{di}{dt} + Ri = 127 \sin(60(2\pi t))$$



$$\frac{d^2 y}{dt^2} = -g + F_r$$

$$\frac{d^2 y}{dt^2} - k \frac{dy}{dt} = -g$$

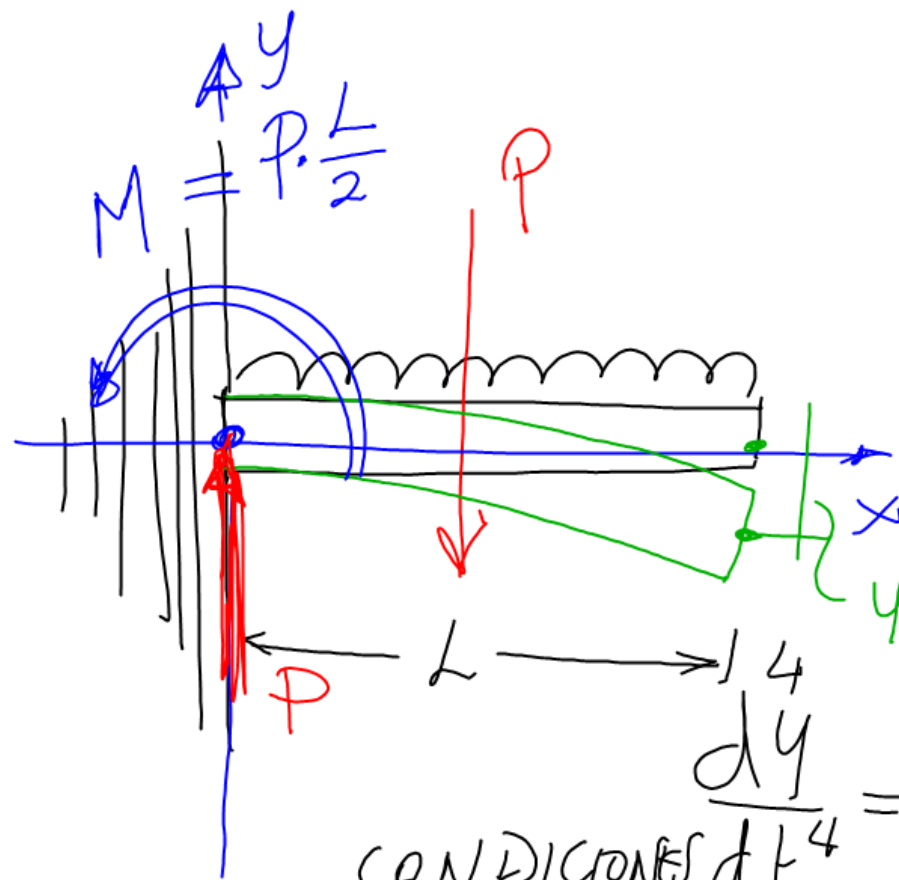




$$M \frac{d^2 s}{dt^2} + H s = 0$$

$$\frac{d^2 y}{dt^2} = -g$$

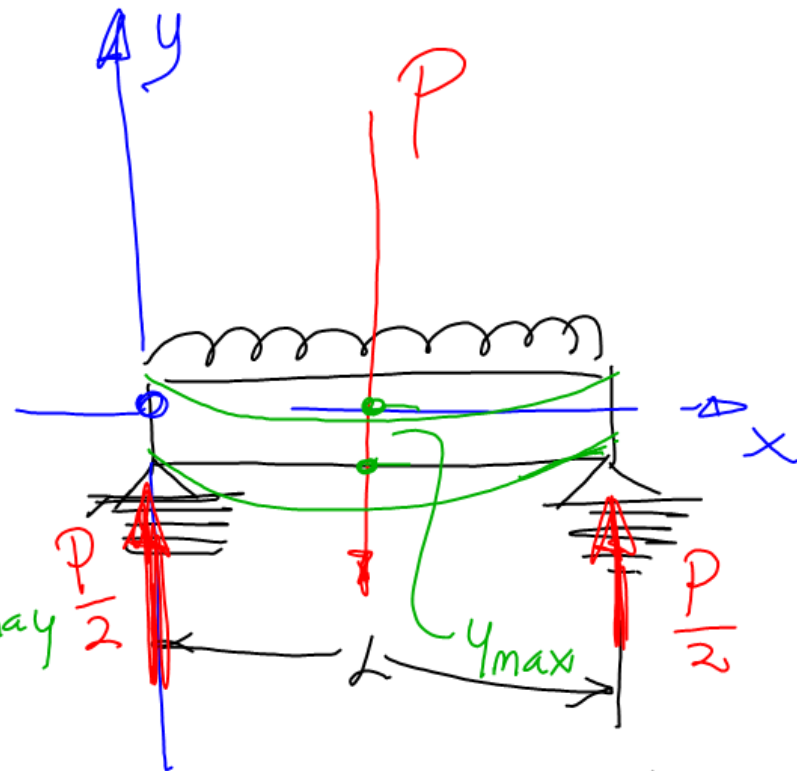
$$\frac{dx}{dt} = v_0 \cos\left(\frac{\pi}{4}\right)$$



$$\begin{aligned}
 x=0 \\
 y(0) &= 0 \\
 y'(0) &= 0 \\
 y''(0) &= P \\
 y'''(0) &= P \cdot \frac{L}{2}
 \end{aligned}$$

CONDICIONES
INICIALES

$$\frac{dy}{dx} = 0$$



$$\begin{aligned}
 x=0 \\
 y(0) &= 0 \\
 y''(0) &= \frac{P}{2}
 \end{aligned}$$

$$\begin{aligned}
 x=L \\
 y(L) &= 0
 \end{aligned}$$

$$y''(L) = \frac{P}{2}$$

CONDICIONES
DE FRONTERA