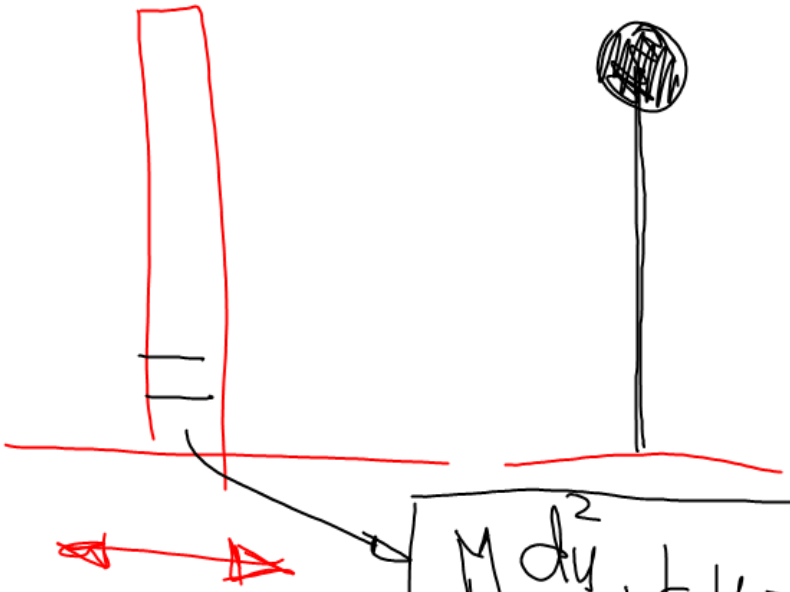


$$M\frac{d^2y}{dt^2}+k_1y=0$$

EDO(2)Lcc H.

$$m^2+\frac{k_1}{M}=0$$

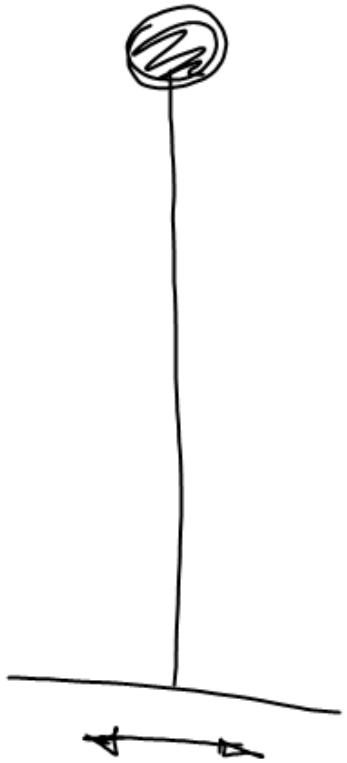
$$m^2=-\frac{k_1}{M}$$

$$m=\sqrt{-\frac{k_1}{M}}$$

$$m=\pm\frac{\sqrt{k_1}}{\sqrt{M}}i$$

$$y=C_1\cos\left(\frac{\sqrt{k_1}}{\sqrt{M}}t\right)+$$

$$+C_2\operatorname{sen}\left(\frac{\sqrt{k_1}}{\sqrt{M}}t\right).$$



$$\frac{d^2y}{dt^2} + R_1 y = F\,sen(\omega t)$$

EDO(2) LCC NH

temblor oscilatorio

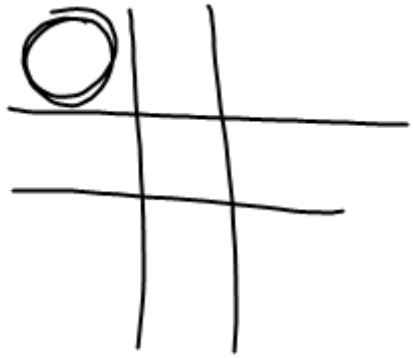
$y(0) = 0$

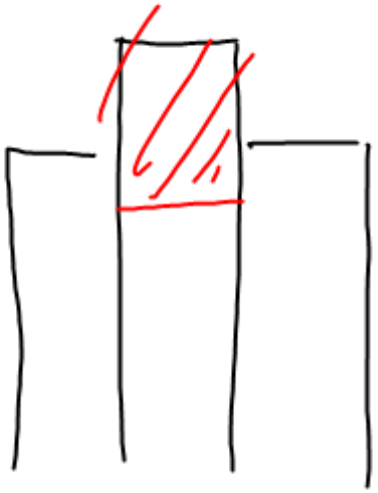
$y'(0) = 0$

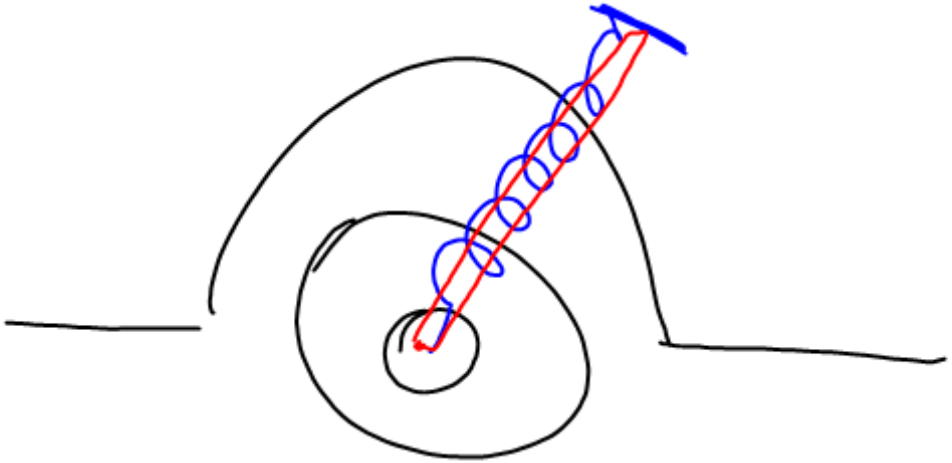
$$\frac{d^2y}{dt^2} + 9y = 10\,\mathrm{sen}(3t)$$

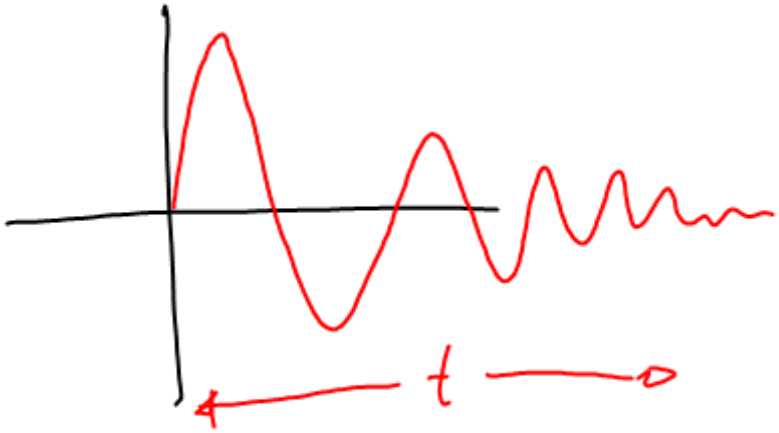
$$y(0) = 0$$

$$y'(0) = 0$$









$$M\frac{d^2s}{dt^2} = \sum F$$

$$= -Hs - R\frac{ds}{dt}$$

$$M\frac{d^2s}{dt^2} + R\frac{ds}{dt} + Hs = 0$$

EDO(2) Lineal