

$$C = 10^{-3} \text{ farad}$$

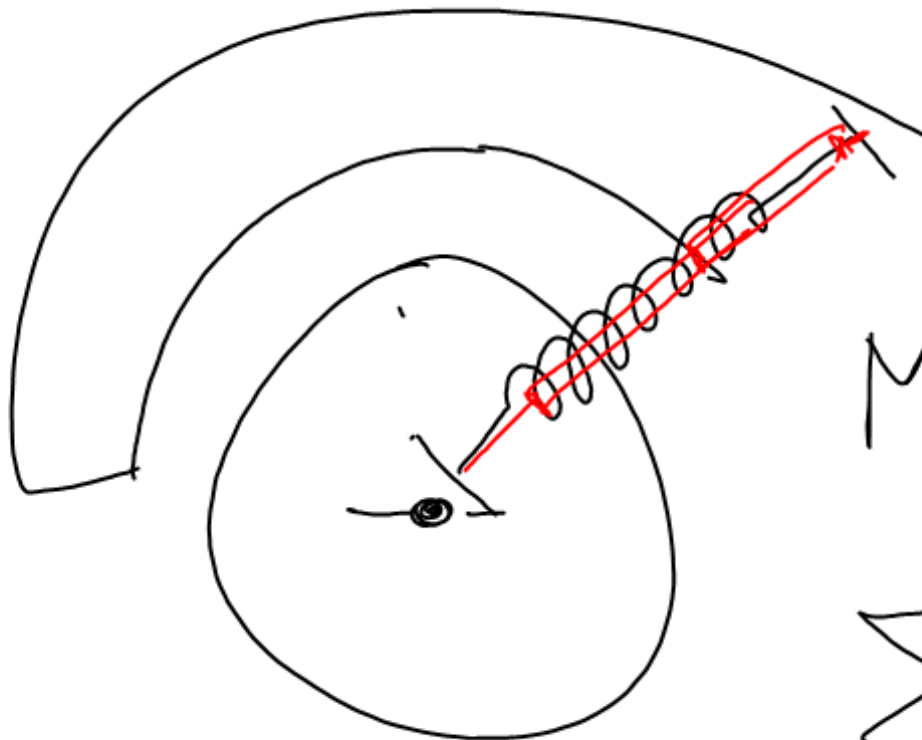
$$R = 10 \text{ ohm}$$

$$\frac{dq}{dt} = I$$

$$L = 3 \text{ Henry}$$

$$R \frac{dq}{dt} + L \frac{d^2 q}{dt^2} + \frac{q}{C} = 120 \sin(60\pi t)$$

$$q(0) = 0 \quad I(0) = 0 \quad \text{EDO}(z) \text{ LCC NH.}$$



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

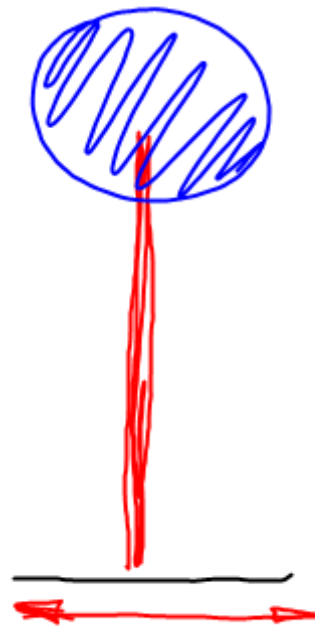
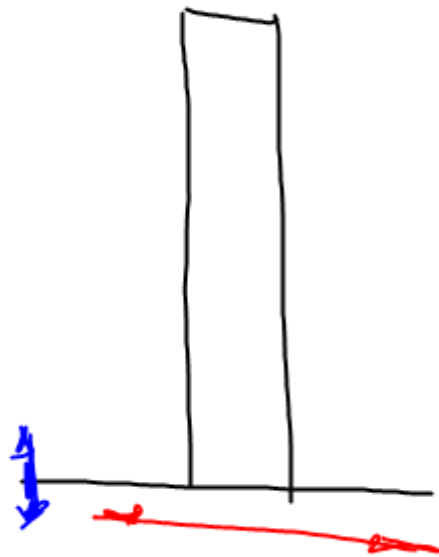
$$\sum F = -ky - D \frac{dy}{dt}$$



$$y(0) = 0.10 \quad y'(0) = 0$$

$$1.5 \text{ T}$$

$$H=2 \quad D=2$$



$$\frac{d^2 x}{dt^2} + 16x = 0$$

$$F = 5 \sin(4t)$$

$$x(0) = 0$$

$$x'(0) = 0$$