

Ejemplo de EDO(3) LCCNH. con condiciones  
 con una función seccionalmente continua

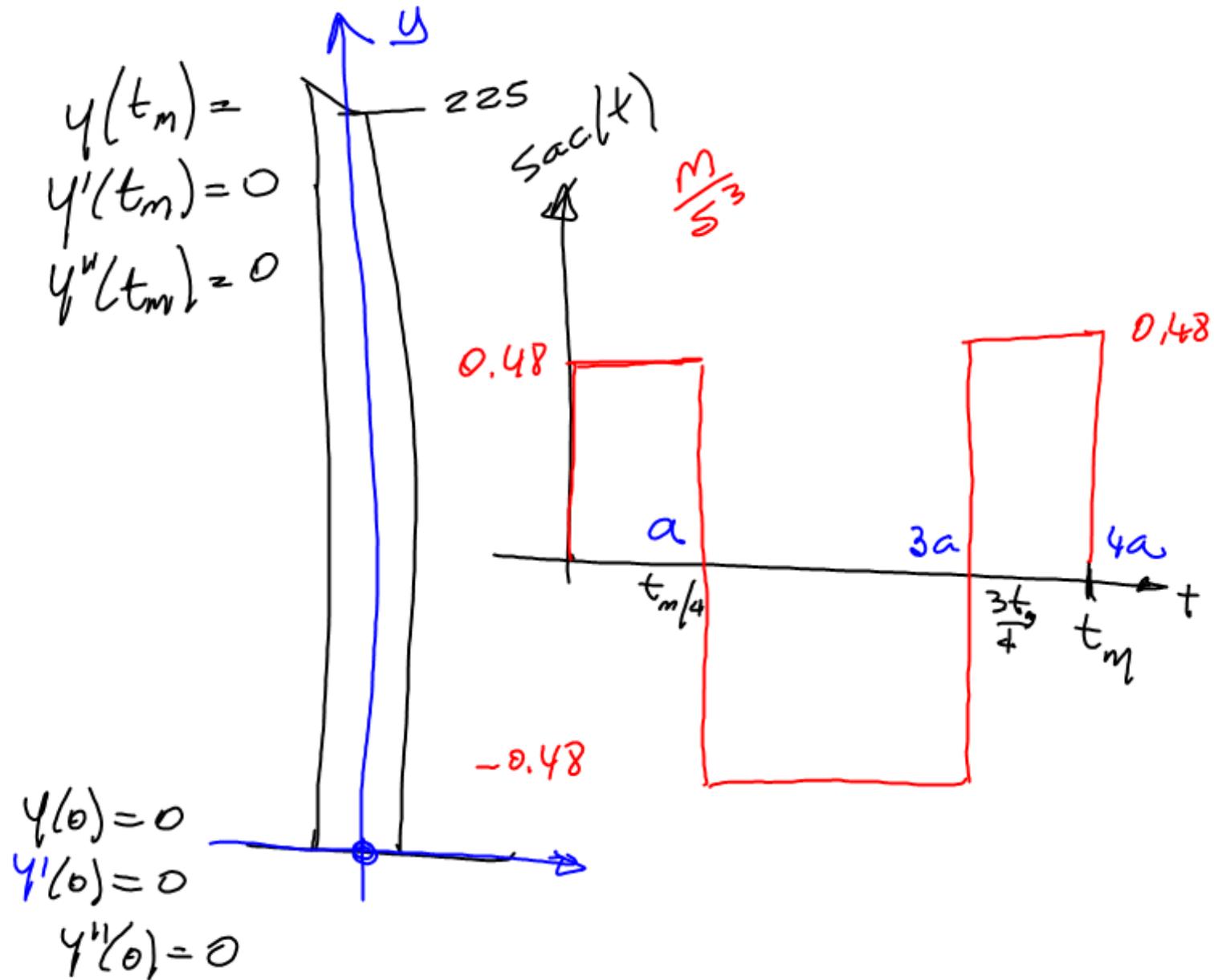
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$k \leq \frac{1.6 \text{ ft/s}^2}{5}$   
 $\frac{1.6 \times 0.304 \frac{\text{m}}{\text{ft}} \cdot \text{ft}}{5^3}$   
 $\underline{\underline{S_{ac}}} = 0.48768 \frac{\text{m}}{\text{s}^3}$

225 elevadores  
 controlados  
 por computadoras  


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 "Sacudida"  
 $\frac{d}{dt} \left( \frac{d^2 s(t)}{dt^2} \right) = k.$



$$\begin{aligned}
 S_{ac}(t) = & 0.48768 \mu(t) - 2 \times 0.48768 \mu(t-a) + \\
 & + 2 \times 0.48768 \mu(t-3a) - \\
 & - 0.48768 \mu(t-4a).
 \end{aligned}$$


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$$\frac{d^3 y(t)}{dt^3} = S_{ac}(t) \quad \text{EDO(3) L cc NH.}$$

$$\left. \begin{aligned}
 y(0) &= 0 \\
 y'(0) &= 0 \\
 y''(0) &= 0
 \end{aligned} \right\} \text{ con Cond. Inic.}$$